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Medical Lib

# CALIFORNIA AND WESTERN MEDICINE

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## *Contributors to This Issue*

REXWALD BROWN

*Is Medicine Drifting into Lay Control?*

CHARLES HAROLD LEWIS

*Obstetrical Anesthesia*

ALFRED C. REED

*Allergy: Practical Experience Versus Theory*

OSCAR F. JOHNSON

*The Neurasthenic Patient*

FRANK W. LYNCH

*The Problem of Prolapse in Young Women with Cystocele and Rectocele*

R. MANNING CLARKE

*Some Observations on the Influence of Bowel Irritation over the Gastric and Duodenal Region*

FRANCIS M. SHOOK

*Sinus Infection in Children*

CHARLES CALVIN TIFFIN

*Cosmetic Surgery of the Thyroid Gland under Local Anesthesia*

GEORGE J. MCCHESNEY

*Advantages of Medical Social Service in Orthopedic Surgery*

LEO L. STANLEY

*How Men Die in Prison*

GARNETT CHENEY

*The Technique of Administration of Sodium Tetraiodophenolphthaleim in Cholecystography*

J. J. SAMPSON AND R. L. MCCALLA

*An Analysis of Heart Sounds and Murmurs by Graphic Means*

THOMAS E. GIBSON

*Torsion of the Testicle*

LEO P. BELL

*The Preoperative Preparation and Surgical Treatment of Carcinoma of the Pancreas with Common Duct Obstruction*

BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

*Subject this month: A Brief of the Best Modern Practice in the Treatment of Primary and Secondary Syphilis*

*Discussed by: Howard Morrow, H. J. Templeton, Hermann Schussler, Jr., Franklin Farman, John A. Cooper, Francis X. Voisard, Kenneth L. Dole, A. E. Edgerton, Dan H. Moulton*

Clinical Notes and Case Reports; Editorials; The Month with the Editor; Medical Economics and Public Health; California, Nevada, and Utah Medical Associations; California

Board of Medical Examiners; Readers' Forum

For Complete Index of Contents see Page 434

Volume XXV

OCTOBER·1926

Number 4



## What is Mead's Standardized Cod Liver Oil?

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# CALIFORNIA AND WESTERN MEDICINE

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## IS MEDICINE DRIFTING INTO LAY CONTROL?

By REXWALD BROWN \*

A DOCTOR OF MEDICINE in active practice in a well-known city takes a rather energetic interest in the progressive development of his municipality. Anent his efforts the editorial columns of a prominent local newspaper assailed him in this wise: "When Doctor Blank received the degree of M.D. these cabalistic initials meant that he was learned in medicine and not that he was learned in municipalities. The diploma when issued meant that he was fitted to practice medicine and not that he was fitted for the management of municipalities."

This editorial point of view is expressive of the general concept of the lay mind toward the participation of the medical profession in affairs other than those of the healing art. All too frequently are heard the statements that physicians do not possess the requisite knowledge in extra medical matters either to have an opinion on or take part in the general movements of concern to society at large. A corollary to this largely accepted conviction is the belief that a physician who concerns himself in any direct way with activities outside his professional fold cannot be a good physician in whose judgment and skill faith can be held.

This lay attitude indicative of some people's contempt of or indifference to medicine's deep relationship to all the structure of civilization should concern our profession to a degree apparently not fully appreciated. It is harrowing to read a paragraph in the report of a senior student to his department head, William J. Kerr, Professor of Medicine at the University of California. (CALIFORNIA AND WESTERN MEDICINE). Kerr is trying the experiment in medical education of apprenticing senior students to well-known practitioners in the state for a period of a month—a return to the preceptor influence. The student reported, among many impressions, the following: "An old druggist in the town said that after years of experience in this country and in Europe with doctors that they have the narrowest minds . . . of any profession. He is probably correct."

It would be easy to laugh off these incidents as purely local in character. They deserve attention, however, because they are straws being blown by the wind. Is the place of scientific medicine in the body politic as secure as we have thought? Have we assumed to the full our great responsibilities or are we becoming slack in thought and careless of our positions as guides in civilization? Are the aims and ideals of our profession being smothered by the commercialism of the age?

### EVIDENCES OF LAY CONTROL

Into the fabric of society are being woven new patterns of profound import. The world seethes with startling thoughts, impulses and reconstructive purposes in the spheres of religion, politics, economics, morals, education, and sociology. Wider knowledge, to which scientific medicine has made contribution, is the dynamic force in social reconstruction.

As we survey the movements in progress, a disquieting feature becomes more and more evident which should concern the medical profession as to its gravity. William E. Musgrave in an article of compelling interest in the issue of May 22 of the Journal of the A. M. A., "Is Universal Life Insurance Coming?" senses strongly the danger which insidiously begins to menace the ranks of organized scientific medicine. This menace is the lay control of medical activities.

There is a very considerable evidence in affirmation of this growing conviction. Musgrave tells us how the spread of life, health, and accident insurance is engulfing large numbers of medical men as

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employees of the great insurance corporations. They become salaried men, subordinated to the positions of technicians and subjected to the policies of the companies.

The movements in the socializing of medicine, as projected or actually in operation, as compulsory health insurance or state medicine, serve to show the partial dominance of the lay mind and that of the politician in the affairs of medicine which embraces the science of public health. Departments of sanitation are frequently subject to political control and manipulation.

A vast work in educational hygiene and school health supervision is conducted by boards of education in this country. Associated with them are scores of voluntary organizations promoting health instruction, influencing standards and practices, creating public opinion, supplying funds for research and demonstrations, and assisting in the enactment of local and national hygienic legislation. In general this work is under the control and supervision of lay boards associated very loosely or not at all with scientific medicine.

Hospitals, in many ways the seats of the science and art of medicine, are largely managed and directed, their policies outlined, by lay boards formed of citizens whose social, religious or business standings are pre-eminent, or of politicians elected to positions of control. The few books written on hospital management assume without question that the policies of a hospital should be vested in boards of lay directors.

In the field of medical education the influence of great universities and of large financial foundations, their respective boards of trustees being very largely of lay personnel, becomes increasingly more pronounced. By promise and by inference of financial help they seek to regulate the placement of medical schools, the adoption of curriculums, and control the selection of and compensation of the teaching professors.

And in another sphere the man of medicine appears to be largely an adjunct or almost entirely disregarded. This is the sphere of social uplift or service. Its votaries number up into the thousands of lay people, and in organizations galore they further propaganda whose purpose is to make the world better. They expound and urge action upon, with a zeal which should be better directed, views on subjects such as heredity, birth control, and eugenics which medical men and biologists say are yet in the infancy of study and experiment.

In the portrayal of these outlined facts there is no intent to belittle the efforts being made by sincere and earnest lay men and women toward a healthier and happier world in which to live. But a note which insistently obtrudes itself throughout all these activities is disparagement of the capacities of physicians as thinkers, doers, administrators, and leaders outside the confines of actual medical practice, the personal relationship of physician to the sick patient.

Singular it is that doctors of medicine with backgrounds of general education and specific learning acquired over years of study not necessary in most vocations and callings have not the intelligence of

storekeepers, financiers, real estate dealers, manufacturers, plumbers, and other lay persons to grasp the principles underlying human endeavor and the knowledge to help formulate the laws conserving the general good of society.

This lay attitude should deeply concern us as physicians. It is one of the factors which calls forth the utterance of the editor of the *Indiana State Medical Journal* that within a few years organized medicine will be fighting for its very existence. The time has come for us to take stock of our affairs that we may determine the direction of our future. Why are we deemed impractical, babes in the woods in general affairs, incompetents in the understanding of social and political movements and useful only as technicians in the healing art?

#### THE WALL OF ALOOFNESS

The answer is that we have permitted ourselves to be walled off from society at large. It might better be said that we have walled ourselves off. And our isolation has been accomplished so effectively that even many who are sick do not try to look over the walls to see what scientific medicine has to offer for alleviation or cure, but seek relief from cultists and charlatans who bark their wonders (?) about the streets.

Scientific medicine has not expressed itself in a way to compel attention. It lives in an atmosphere of reserve, partial detachment from the rest of mankind. All reasons for the development of this atmosphere in which we live become concentrated in one reason, a code of behavior, which antedates the Christian era. The Hippocratic oath or code as a guide for medical men has become traditional, white with the age of centuries. The principles of ethics of the American Medical Association bear the imprint of this ancient standard.

But this "credo" of the profession, called by Gompertz "a monument of the highest rank in the history of civilization," when carefully studied is seen to be a moral guide in the relationships between student and teacher physician and between the physician and his patients. And in these relations the "credo" is and should be as binding today as it was in the days of the best in Greek civilization. The Golden Rule is the essence of the code.

Though nothing is said in the Oath of Hippocrates about the deportment of physicians in the movements for betterment and enlarged happiness in civilization, the medical mind has become imbued, over a period of centuries, with the conviction that aloofness from matters other than those of personal service to the sick is fundamental to the spirit of the code. How much a feeling has grown no one knows. It exists as do unwarranted traditions in other spheres of thought. And traditional beliefs are all too often strong deterrents to progress.

Traditional aloofness has become a despot and has made medical men slaves, fearful of the master and fearful of the opinions of the fellow-slaves. Any form of public expression by a physician on matters of medical or general concern, even in the interests of society, is considered by most professional

confrères a breach of the professional code. It is looked upon as a form of personal advertising.

Is this deadening attitude of mind in consonance with our Principles of Medical Ethics? One who carefully reads the context as a whole cannot find therein any sentence which tends to set medical men aside from the general concerns of existence. In truth the very opposite pertains. The first statement in the principles is, "A profession has for its prime object the service it can render to humanity." In the chapter entitled *The Duties of the Profession to the Public* it is stated that "Physicians as good citizens, and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity." The concluding statement in the principles is, "These principles are primarily for the good of the public and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community."

Only loyalty to our profession withholds our recognition that public opinion toward us is far from endorsement of us and our methods. Scientific medicine must face the fact, however, that the public has lost confidence in us measurably, not alone as regards our inadequacy in health leadership, but even as competent in the management of disease. The responsibility for this condition rests squarely on the shoulders of medical men.

#### ORGANIZED MEDICINE LOSING CASTE

Common sense compels us to admit something is wrong within the structure of organized scientific medicine. We are losing caste, failing to register the worth of our ever mounting knowledge, muffing our opportunities for higher service, and we are in danger of becoming pawns instead of guides in progress. Medical men should be filled with shame that we are unable to acquaint the public with the values our profession can contribute to a growing civilization. Instead we bow our heads to organizations of lay people, as The American Association for Medical Progress, who pitying our poor endeavors, yet believing in us, attempt to do educational work for and in support of us.

Dr. Wendell C. Phillips, president of the American Medical Association, in his recent presidential address, published in the journal of the American Medical Association, April 24, challenges the public to make use of the brains resident in the body of the medical profession. The challenge should be to the medical profession to make use, of its own volition, of the brains it possesses so that the public may hearken to and act upon the words of organized medicine.

Granted that shackles binding our efforts must be removed, what is the method of procedure; what is the way of larger influence? Organized medicine itself must open the gates. That we are concerned about the damaging criticisms hurled at us is shown by two reactions in our profession. One is the growing desire to give the public information. This is

being done somewhat by the American Medical Association and by a few state societies through publications for lay reading. The other reaction is a demand for changes in the amount and character of the technical courses in the medical schools. There are arguments and papers about entrance requirements, some physicians insisting that medicine's difficulties would be solved by lowered standards of preliminary education; while others say such action would make the position of medicine even less happy than it now is.

#### THE WAY TO STRENGTH

Medicine's way to a position of strength in the minds of the people involves a change more profound than informative broadcasting or alterations in the character of pre and actual technical studies. The change must be that of nursing into compelling expression a voice now very weak, which carries, however, the truest note in scientific medicine's structure of service. The highest ideal of medicine is the promotion of individual, community, and national health.

The teaching of the science of medicine needs drastic revision so that a new tide of thought may sweep through the classrooms of the medical schools. In addition to studies in the science and art of medical practice, new course must be given inculcating students with knowledge of their high responsibilities as law givers to the people and as teachers of health. Graduates of today tell that during their years of study little or nothing is given them of the history of medicine through the centuries, of the relationship of medicine to life at large, of the forces ever tending to destroy scientific medicine, of the prejudices and ignorance of an indifferent public, of social spheres where the knowledge of the medical man could be useful, and of the worth of medicine in helping to advance civilization. And the subject of medical ethics which looms up so prominently after graduation is given only cursory consideration in most schools. In discussions of medical problems, young physician graduates of outstanding medical colleges have been heard to say that their introduction to ethics consisted of their being handed the Principles of Ethics at or about the time of their graduation.

Medical education in and out of college needs the attention of the members of organized scientific medicine. The errors of the past, the stupidities of our insularity, our failures to impress humankind of our values to them in all the spheres of life call us to an accounting with ourselves. We, the medical profession, must survey, must reinspect our positions in the light of present-day thought, which is throwing aside the hindrances to progress imposed by precedent, custom, and tradition. Where is scientific medicine heading, what is its concern with the vital problems of today, is its knowledge becoming humanized, and is it bearing aloft the emblems of leadership?

We medical men have become rather set in our ways. Consider our weekly, monthly or annual medical gatherings. There are hundreds of them—county, special, state, and national medical society meetings. And what is the general order of proce-



ture in all of them? Over 90 per cent of the time is devoted to the reading and discussion of scientific papers and presentation of clinical material.

The worth of an adequate number of such meetings is not decried. They are fundamental to the continuous diffusion among us of the discoveries and experiences in the fields of research and clinical medicine. The point is that our increasing familiarity with special fields of knowledge is blinding us to our relationships to life as a whole or is preventing us giving due consideration to our responsibilities in general affairs.

There must be an awakening to new purposes, new duties and expanded activities if organized scientific medicine is to be other than a competitor for the management of the sick with the pseudo-scientific and the ignorant and fanatical cultists. We must shatter our attitude of reserve and come out into the open as forceful advocates of the great aim of scientific medicine—the promotion of health.

Health is fundamental to achievement in all spheres of human activity. Scientific medicine should work continuously not only to seek out the laws of health, but also to make these laws operative in a progressive civilization. Scientific medicine, the facts of which are demonstrable and verifiable by observation, experiment and test, needs no defense, but the disciples of medicine who know the facts must learn that it is incumbent upon them to inspire confidence in themselves as expositors of the knowledge.

Through the avenues of the local, state, and national medical societies must scientific medicine enter the arena of larger human service. Our attack must be first upon the paralyzing routine of our meetings and upon a complaisant acceptance that our learning is for the elect only. Let us have a new order of procedure—half of each meeting or whole meetings at frequent intervals to be devoted to consideration of the matters immediately related to medical practice as to their effect upon our profession and upon society at large.

#### AN OUTSTANDING EXAMPLE OF MEDICAL LEADERSHIP

In these meetings we must face the problems which we now ignore and which the public tries to solve with more or less contemptuous disregard of medicine's counsel and guidance. Physicians must develop powers of leadership along all medical fronts. The wider biologic knowledge possessed by physicians as a class enables them better than others to formulate the policies which pertain to municipal and national health and sanitation, to educational hygiene, to medical economics, to hospital management, to social service, to medical education, and to the propagation of a virile race.

The policies formulated, medical men through intensive, associative effort must be the powers which introduce and influence acceptance of the policies in the life of the world. Is there any reason why we cannot be initiators, administrators and executives in our own fields as business men, financiers, engineers and others are in theirs?

To say that we cannot is to forget that in the

science of medicine there looms forth a figure of unparalleled administrative genius, Dr. W. G. Gorgas, whose life should ever stimulate us to the continued insistence that the public should adopt those scientific measures which create health. Doctor Gorgas, an executive and compelling force in the domain of medicine was the man who made it possible to build the Panama Canal. And until he became acclaimed the world over for his tremendous achievement he was assailed and derided, and his work was interfered with by the lay control in charge of the general administrative business and engineering conduct of the building of the canal. Noted lay executives and big men of affairs called him a stupid doctor with nonsensical ideas. Yet business acumen and engineering skill would have failed entirely in putting through the canal without the underlying medical knowledge made effective by a capable medical administrator.

#### THE RESPONSIBILITY OF SCIENTIFIC MEDICINE

Organized scientific medicine must make itself a dynamic force, respected and honored as basic to all progress. This is medicine's greatest responsibility. Medical men must take the offensive and convince humankind of the wealth of resources in medical science. The worth of the profession should be so splendidly revealed by the labors of physicians that great warmth of respect and support will always be conceded by the public. The place of medical science in the esteem and confidence of the lay mind should be so high that philanthropists would never hesitate to assist financially in the efforts made by the profession to better living conditions and alleviate suffering.

Medical men should make it obligatory upon themselves to render strict business accountings for the management of public service institutions and other trusts, but the policies directing the expenditures should not be dictated from without the circle of medicine. The rules governing clinical practice, medical research and the management of medicine's activities should emanate from within the profession and not from the lay public, whose efforts are so often dictated by business experience.

Scientific medicine is a profession whose evolution began as Osler has said in that wonderful Grecian era when Hippocrates lived and received his inspirations from the spirit of the times which asked of all measures, "Do they make life a better thing?" Business asks, "Do these measures produce a profit or make expenditures and income balance?"

A cloak of mystery has far too long been wrapped about the science of medicine. The disciples must tear it aside. The public must be taught that physicians are not in league with occult forces, that medical knowledge, like all other scientific knowledge, is subject to the laws of verifiable fact, that medical knowledge is not divisible into sects, and that no knowledge is of more worth than that which conduces to self-preservation and the continuance of the race. The studies essential for acquiring such knowledge, the ways of incorporating such knowl-

edge into the fabric of civilization and the methods most valuable in acquainting the public with fundamental medical truths are pre-eminently the affairs of organized scientific medicine and not those of the lay public.

## OBSTETRICAL ANESTHESIA

WITH SPECIAL REFERENCE TO THE SO-CALLED  
SYNERGISTIC ANESTHESIA OF GWATHMEY

By CHARLES HAROLD LEWIS\*

DISCUSSION by Charles B. Cortright, Berkeley; Reginald F. Grant, San Francisco; T. Henshaw Kelly, San Francisco.

THE purpose of this paper is to mention briefly the various means that have been used for alleviation of the suffering of obstetrical patients during delivery, to discuss the various methods which are in use, and to point out those methods which are the best suited for general practice.

*Ether*, because of its slow action and the amount required to produce analgesia, as well as its tendency to nauseate the patient and disturb the uterine contractions, is not a very successful means to be used in normal obstetrics unless its use is limited to the last part of the second stage. Where a more or less prolonged anesthetic is required, as in a forceps extraction or some other obstetrical operation, certainly ether is the anesthetic of choice, chiefly because it affords a much greater margin of safety than do other anesthetics. Hence, in general practice, especially where sufficient and competent help is not available, ether will probably continue to be used for an obstetrical anesthetic.

*Chloroform* seems to be used less and less for obstetrical anesthesia, although I agree with Williams when he says, "It is well known that the dangers distinctive of chloroform are markedly reduced before time of labor and further, generally speaking, chloroform is preferable in normal labor for by its use obstetrical anesthesia can be rapidly and safely produced. I believe it is practically devoid of danger when properly administered and should be used whenever there is time for its use unless the patient has conscientious objections to its employment." In a word, then, chloroform is preferable in normal deliveries for the reason that it is quicker in action, less disagreeable to the patient and comparatively as safe as ether when used at the proper time and in the proper amounts.

"*Twilight Sleep*." Since Gauss and Krönig (1907) reported 1000 cases in which patients were administered the so-called "Dämmerschlaf," there has been more or less discussion as to the merits and demerits of this method of relieving the pains of childbirth. At the present time this method is used

very little in the continental clinics and even where it originated it is only used for those patients who request it. Members of the staff at Freiburg told me in 1924 that only one-fourth of the women entering the clinic asked to have twilight sleep. It is scarcely used at all in England and has fallen quite largely into disrepute among American obstetricians, due to the fact that labor is likely to be prolonged, interference by forceps is more frequently necessary and fetal mortality has been higher. However, in Freiburg they maintained that by the use of Narcophen in the place of morphine and by using only one dose of this drug during the treatment the fetal mortality had been reduced so that it is no greater with this method than with any other. While this is commendable yet it is apparent that this method requires more time than is ordinarily possible for the busy general practitioner to devote to his obstetrical patient. For these reasons the use of twilight sleep is practically barred from general practice. One employing this method should unquestionably devote a good deal of time to the development of technique, should hospitalize his patients and should have trained attendants to observe the mother and especially to control and report the fetal heart rate.

*Lumbar Anesthesia* is mentioned only to be condemned. The results are said not to be uniform; the anesthetic effects are sometimes transient; headache and nausea often follow. The most serious objection lies in the fact that eight deaths were reported out of 1708 cases in which this method was used.

*Hypnotism*. A few deliveries under hypnotism have been reported but obviously it is a method not to be used in general practice for very few general practitioners can possibly assume the rôle of hypnotist, and furthermore the patient must be a very susceptible subject and one who has already been hypnotized on previous occasions.

*Nitrous Oxide and Oxygen* is one of the very best methods of producing obstetrical analgesia and anesthesia. On account of its cost the majority of patients can only afford to have it used during the second stage of labor. For some patients who can afford it "gas" may be used during a part of the first stage as well as during the second. In normal cases in a hospital this form of analgesia is certainly a most excellent one. For several years I carried a McKesson portable machine in the back of my car and allowed the nurse, the husband, the relative, or even the patient herself, to administer the gas during the second stage of labor. Such a plan is often a financial loss, however, for if a patient is unable to afford hospital care, she is not likely to be able to afford adequate compensation for the time and expense required for nitrous oxide analgesia.

The method of administering it is to begin just as the patient feels the contraction coming on, giving pure nitrous oxide or a mixture containing from 1 to 5 per cent of oxygen or air. The patient is instructed to take three or four deep inhalations of the gas in rapid succession and then after the last inhalation to hold the breath and bear down with as much strength as possible. Using this method the suffering in the second stage is considerably diminished. The patient is able to work better and more quietly

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and in many cases the time of this stage is thereby considerably shortened. Full anesthesia should be given when the head passes the vulva and for this ether is best, either in combination with nitrous oxide and oxygen or alone if necessary.

I have not tried ethylene in obstetrics but believe it would not be as successful an analgesia as nitrous oxide on account of its disagreeable odor.

*Synergistic Anesthesia*, developed since January, 1923, is so-called because it is based on the synergistic action of several drugs, namely, magnesium sulphate, morphine, quinine, and alcohol. The idea was conceived by James T. Gwathmey and the experimental work was carried out in the Lying-In Hospital, New York City.

A number of formulae were used before the one in vogue at the present time became established.

This method seems to be fairly harmless, is not expensive, can be used by the average physician without special training and can be used in home or hospital. Synopsis of technique: (1) the usual preparations made and enema given; (2) one-fourth grain morphine dissolved in 2 cc. of 50 per cent magnesium sulphate is injected intramuscularly; (4) an ether instillation is given per rectum; (5) a third magnesium sulphate injection and the ether instillation may be repeated or not, as discussed hereafter. The preparation and enema given do not differ from the ordinary preparation and enema.

The injection of one-fourth grain morphine dissolved in 2 cc. of 50 per cent magnesium sulphate should be done with a 19-gauge needle one and one-half inches long and given deep in the gluteal region. The injection is commenced when contractions are strong, coming at intervals of three to five minutes and there should be at least two fingers' dilatation of the os uteri.

One-half hour after the first injection 2 cc. of 50 per cent magnesium sulphate is injected in the same manner but without the morphine. If the sedative effect of the hypodermic injections is good the ether instillation is withheld until the contractions are again strong and regular and the patient complains of pain. If the sedation is not good then one hour after the first injection the ether instillation may be given regardless of the amount of dilatation of the os. It is preferable to wait, however, if possible, until there is at least three fingers' dilatation. The rectal instillation is composed of the following:

Quinine hydrobromate .....	grains	20
Alcohol .....	drams	3
Ether .....	ounces	2½
Olive oil (good quality) .....	gs. ad. ounces	4

In the original technique this mixture was first made by mixing the alcohol and quinine and adding the ether and olive oil. It was then bottled until time for use. I have obtained better results by mixing the alcohol, quinine and olive oil, and putting it up in a 4-ounce bottle, waiting to add the ether just before the instillation is to be given.

Details of the beginning of the rectal instillation are: It should be given through a small rubber catheter, size 20 or 22 French, using either a funnel or a large syringe; the ether mixture is warmed to

body temperature; the patient is placed on her left side with the buttocks at the edge of the bed. Vaseline should be liberally applied about the anus so that if a small amount of ether is spilled it will not burn. It is well to suggest to the patient that this procedure will help relieve her of pain, but one cannot promise absolute exemption from suffering. The patient should be told not to press down during the pain but rather to relax and to breathe deeply with her mouth open. She should be told to draw up with the sphincter as though to avoid expelling gas. Davis states that one ounce of plain olive oil should be injected into the rectum just before the ether mixture, and also one ounce just after the ether mixture, although good results have been obtained by injecting the ether mixture alone and the latter is simpler.

Asa B. Davis (Surg., Gyn. and Obs., June, 1925) describes the technique and discusses the subject thoroughly. He states that when the effect of the first ether instillation has worn off a second or even a third instillation may be given. I have never employed more than one and have felt that if good results were not obtained or if the labor was so prolonged as to require more, then some other method should be used or the patient should be assigned to that class of a percentage of failures which is bound to occur with the use of any method.

It is important not to begin the injections too early. It is also important not to delay them until later than the time indicated. If a rapid delivery is expected when the patient is first seen, the first part of the method may be used without the rectal instillation, if so desired.

Davis and his associates claim that 90 per cent of the patients secure some relief and many a great deal. I have used the method wherever possible and practical for the past sixteen months, and have seen many very good results. I believe that most of the poor results experienced with the method are due to faulty technique, improper administration or to mistakes in the time at which the various procedures are used. This seems to be one of the most difficult factors to control as no matter how experienced one is, it is often difficult to predict the length of time a delivery is likely to consume.

Davis, to his satisfaction, has used this method in over 300 home confinements.

In home deliveries this method, like the method of twilight sleep, consumes an inordinate amount of the physician's time. I therefore recommend its complete application only in hospital practice where one may properly instruct the nurses in the giving of the injections and instillations. On the other hand the injections of morphine and magnesium sulphate may be given alone at the patient's home with good results and considerable benefit.

Synergistic anesthesia is inexpensive, especially when compared to nitrous oxide-oxygen, and it affords more relief during the first stage of labor than any other method with the possible exception of twilight sleep. This method has been found safe in over 1500 labors in the Lying-In Hospital. It is not contraindicated in the presence of placenta praevia, toxemia, or in the presence of cardiac complications. Davis states that no presentation or position is a contraindication to its use. The only

contraindications are diabetes, colitis, and auditory disturbances.

#### DISCUSSION

CHARLES B. CORTRIGHT, M. D. (2287 Telegraph Avenue, Berkeley)—To assist a patient in active labor by alleviating the agonizing pains through the proper and intelligent use of one or more of our well-known drugs is truly the proper thing to do.

Chloroform seems to be the most useful anesthetic. It is cheap, occupies small space in the handbag; almost any inexperienced person can administer it; patient arouses easily, usually without nausea and vomiting, and seldom are there any unfavorable results. Of course, like other anesthetics, it has its true contraindications.

Ether is the safest anesthetic we have at hand and, while not ideal for administration to "get the jump" on labor pains at the proper time, it is the best anesthetic we have for any obstetrical operation. It is bulky and, if very much is administered, will cause nausea and vomiting.

Twilight sleep can only be used in hospital practice and under the most exacting and painstaking conditions. It should never be used if there is any doubt about the healthy condition of the mother or fetus. It has been laid aside by most obstetricians on the shelf of antiquity as something that is better not mentioned. Lumbar anesthesia should be thoroughly condemned. Hypnotism does not sound good to me. Nitrous oxide and oxygen is a very good combination and should be used more often than it is. Although its cost is high, it is not prohibitive. The cost of the necessary machine is an important item of expense to the physician, and the impracticability of lugging it around together with small cylinders must not be forgotten. The supply of the gases is not inexhaustible and one is liable to run out of supplies at the most inopportune moment. Its field of best work is in the hospital. Nausea is rare on an empty stomach and contraindications are few. Synergistic anesthesia seems to be the very best that we have at hand to date.

With but few lessons in its use one can carry on an obstetrical case in private home or hospital and feel assured that he has done the proper thing at the proper time. If necessary, only a few inhalations of ether or chloroform are needed to help out at the end of the second stage and to keep the mother under better control. If there is a laceration as the result of the delivery, the patient is usually quiet enough to perform an immediate repair. Following a normal delivery after using this anesthetic, there are no untoward effects. Glycosuria and colitis seem to be the only contraindications.

REGINALD FRANKLIN GRANT, M. D. (Flood Building, San Francisco)—In discussing the morphine-magnesium sulphate injection and colonic ether instillations as a means to help control pain during the first two stages of labor, I wish to draw attention to the fact that this analgesic is an offspring of rectal anesthesia introduced by James T. Gwathmey and described by Johnson in the *N. Y. Med. Jour.*, October 28, 1916, page 846. Up to that time Gwathmey had performed 2000 operations under rectal anesthesia without fatalities. In 1923 he conceived a technique for the alleviation of labor pains, using in addition to his modified rectal anesthesia, a hypodermic injection of morphine and magnesium sulphate. As this hypodermis injection and rectal instillation does not abolish surgical pain, it cannot be called an anesthetic; but as it lessens surgical pain, it is a true analgesic and was so termed in Asa B. Davis' article in *Surg., Gyn. and Obs.*, June, 1925, page 868.

The original formula and the time and indication for its administration have been slightly changed the last year. It has been the custom to withhold the analgesic till there was three fingers' dilatation, the contractions active and occurring from three to five minutes apart. This, however, is now disregarded, and as soon as the patient goes into active labor, has severe pains (which vary according to the rigidity of the cervix) in association with colicky, ineffective uterine contractions, and also in those who are intolerant to pain or in whom much suffering is undesirable, the morphine-magnesium sulphate injection can be made immediately and dilatation will proceed faster and with less exhaustion on the part of the patient than if she were left alone to dilate her hypersensitive cervix

up to two or three fingers. Furthermore, the injection and ether instillation is given regardless of the position or presentation of the head. If after twenty minutes no results are obtained from the morphine-magnesium sulphate injection, the ether and oil instillation may be given.

After the patient has had her injection and rectal instillation, we have from two to six hours' time before the cervix is completely dilated and the patient is ready for delivery. When the cervix is completely dilated and the head strikes the perineum, the patient will again become restless, and an examination will disclose that she is ready for delivery.

The patient is now taken to the delivery room and receives one-half cc. of obstetrical pituitrin hypodermically, because the uterine contraction and expulsive forces of the uterus are nearly lost.

The thinning out of the perineum as the head stretches it again causes pain, and it is here that we use the nitrous oxide gas. When the pain is over, the gas is removed, and the patient is told to rest. This is repeated until the perineum is thinned out and blanches, when an episiotomy may be done during a pain and the head delivered.

When the baby has been delivered, the perineal sutures are put in place, but not tied. I now give another half cc. of pituitrin, which facilitates the delivery of the placenta, after which the perineal sutures are tied. Ergot may now be given and the patient put to bed.

In my opinion, failures are due to (1) too much dependence on the nurses to carry out the preliminary technique; (2) an improperly cleansed lower bowel; (3) an idiosyncrasy on the part of the patient to drugs like morphine and quinine. As this analgesic requires the additional administration of nitrous oxide gas during the delivery of the child, it is not a procedure to be used at home.

T. HENSHAW KELLY, M. D. (490 Post Street, San Francisco)—The experience upon which I base this discussion is that obtained from some of my own patients, but largely from those seen in association with R. Knight Smith of San Francisco.

Firstly, we find that in over 90 per cent of the cases in which Gwathmey's method of first stage anesthesia is used, the patients claim to have experienced great relief, although about 2 or 3 per cent of them seem to have become excited rather than quieted, and in these patients the course of the first stage of labor has not been changed in any respect.

Secondly, we feel, as a result of several experiences, that the morphine-magnesium sulphate combination had best not be used in a patient who is expected to deliver within an hour or an hour and a half. We have had some difficulty in reviving three babies in which this rule was not observed.

Thirdly, we find that the low application of forceps is necessary somewhat more frequently when this method has been used. The forceps are necessary to deliver the head over the perineum, because the occasional patient, still somewhat under the influence of the drugs employed, does not co-ordinate her expulsive powers sufficiently well to deliver the head spontaneously.

In other than the two instances mentioned above we have found no drawback to the method and use it constantly. The fourth-grain dose of morphine is much more efficient than the original sixth, and if sufficient time—at least one-half hour—is allowed to elapse before giving the rectal medication, almost no trouble is encountered in obtaining complete retention of the ethereal enema.

We also find that many patients are relieved of pain for one or two hours by the morphine-magnesium sulphate hypodermically, and in these we withhold the ether oil mixture until such time as they begin to be restless again. In this way it is often possible to prolong considerably the effective period of the analgesia.

We use nitrous-oxygen mixtures during the pains of the second stage and find that the patient under the influence of the morphine and ether obtains much greater relief from the gas.

Having watched just about 250 of these patients now, and hearing their personal comments on the results obtained in their particular cases, I cannot but feel that this method of relieving some of the pain of the first stage is the greatest boon granted to the parturient woman since ether and chloroform became hers.

## ALLERGY: PRACTICAL EXPERIENCE VERSUS THEORY †

By ALFRED C. REED, M. D., San Francisco

### I. INTRODUCTION

I HAVE no new material and no statistics to present and it is not my intention to discuss contradictions between theory and practice in the field of allergy nor in the slightest degree to criticize the remarkable clinical results achieved by special workers in allergy. Their accomplishments constitute a recent and important chapter of advance in medical practice in which we all share advantage, and for which we are all grateful. It is my purpose in a rather imperfect way to make an attempt at orientation in the complex maze of allergic fact and fancy in which the practicing physician finds himself today. The attempt must be imperfect because even yet our knowledge is fragmentary and we can hardly begin to look behind the huge mass of data to the controlling laws of allergy which are doubtless much more intimately related to vital processes than we have thus far suspected.

### II. CLASSIFICATION OF ALLERGIC PHENOMENA

Classification of allergic phenomena can well follow Hanzlik's description ("The Basis of Allergic Phenomena," Jour. Amer. Med. Assn., June 21, 1924) of allergy as the manifestations of altered physicochemical relations in the blood and tissues. Hanzlik divides allergic manifestations into two types. The first of these is anaphylactic. This is characterized by a certain sequence of events: (1) introduction parenterally or otherwise into the system of native or complex proteids; (2) a period of incubation in which hypersensitivity develops; (3) reintroduction of the same proteid is then followed by anaphylactic shock. This shock is shown by a variety of symptoms, such as fever, rashes, edema, joint pains, leukopenia, swollen lymph glands, etc.; (4) this anaphylactic shock can be transmitted by transfusion to insensitized animals, though in a milder degree; (5) increased excitability can be demonstrated in excised involuntary muscles of various organs; (6) histologic tissues changes and physicochemical blood and lymph changes are found; and (7) desensitization can be produced by treatment with the same and different proteins and a large number of other agents.

The second class of allergic phenomena includes idiosyncrasies, protein and nonprotein responses, colloid, irritative, and other reactions, etc. He describes the manifestations as follows: (1) anaphylactoid phenomena can be produced by a large variety of unrelated agents, native or complex proteins not being necessary; (2) anaphylactoid phenomena do not have an incubation period or preliminary sensitizing introduction; (3) the symptomatology is very similar to that of anaphylactic reactions; (4) apparently this hypersensitiveness can not be transferred by transfusion; (5) increased excitability of involuntary muscle has not been

demonstrated directly for most of this class of sensitizing agents. (Hanzlik notes certain exceptions); (6) histologic and physicochemical changes in blood and tissues are even more striking than with anaphylactic reactions; (7) desensitization can be produced by a considerable variety of agents, having no necessary chemical relation to the sensitizing agent.

Hanzlik reduces the basis of these two classes of allergic reactions to a common denominator, consisting of a disturbance in the physical and chemical mechanisms of the blood such that functional stimulation or depression of cells results in alteration of physiologic functions.

With such a clear-cut theoretical classification of allergic manifestations, we are ready to consider clinical pictures in the patient which are not fully explained by our current clinical practice.

### III. CLINICAL PHENOMENA IN THE LIGHT OF ALLERGIC THEORY

(1) The multiplicity of clinical evidences of allergy brings with it the necessity of correlating all such manifestations in each patient and of studying in large groups of patients the incidence of the different allergic symptoms in association with each other and especially with other pathologic changes, types of heredity, varieties of endocrine status, and nervous as well as psychologic environment. Increasing experience with patients in general leads to the conviction that whenever allergic evidences are present, all of these factors must be carefully studied in detail to substantiate a diagnosis. Diagnostic rules in turn can only follow collection of such information on a large scale. At present we sadly lack such information. It should be one of the first duties of allergy clinics to develop such studies. Allergic manifestations in all systems of the body should be studied after this fashion. The skin, gastrointestinal tract, eye, blood, endocrine organs, circulation, and nervous system, at least, ought to be searched and studied, as well as the respiratory tract. Proper intensive study along these lines might well give information of equal or greater value than the comparatively superficial tabulations we now deal with, of thousands of patients sensitized to thousands of more or less specific substances.

(2) It is impossible to believe that all or most allergic manifestations are specific for a definite antigenic substance alone. Our theoretical classification does not make it necessary and our clinical experience contradicts it. We see group sensitizations and spreading sensitizations and, finally, we see patients who react either with a skin test or by systematic phenomena to almost all proteins and even nonprotein irritants. If allergic symptoms were always due to specific substances which in turn gave specific skin reactions, our diagnostic study could safely be limited to such skin tests alone.

(3) It is impossible to believe that all allergic phenomena are produced by proteins. Simple chemical agents, colloids, metals, arsphenamin, coal-tar derivatives, and on through a long list, may react characteristically as well as proteins.

(4) From the clinical point of view it is evident that we need much more information as to the nature of food and drug idiosyncrasies. It is possible that studies directed here might be more fruitful of

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understanding of the pathology of allergy than the piling up of evidence on skin reactions in relation to asthma.

(5) We see a decidedly familial and hereditary relationship in a majority of allergic patients. While much has been written on this point, most of our data is too narrow and unqualified to be of service. There is concealed here a key which also may unlock some of the now hidden laws of allergy. Again, careful, intensive study is needed, and is remarkably rare. It is my belief that this aspect of the problem of allergy is one of the most important and that its solution will reveal the fundamental secret of allergy to be a function of the nervous system, whereas the evident pathology lies in the tissue cells.

(6) As has been intimated, we do not know the underlying pathology of allergy and this deficiency cripples us especially in dealing with a class of allergic patients free of constant special sensitizations, but whose autonomic nervous system is obviously at fault. These individuals drift along on empiric therapies and often develop frank major allergic phenomena. Too little emphasis, in this connection, has been placed on the rôle of suggestion, hysteria, psychic repressions and conflicts, and reflex habit in the production of serious allergic symptoms. Correspondingly, entirely too little use has been made of these factors in treatment, especially in the case of intractable asthmas.

(7) Observation of only a few allergic patients is sufficient to demonstrate how little we know of the selective qualities of allergic responses. (Why does a patient have asthma, instead of mucous colitis or hives?) This fact, too, indicates an underlying and at present unknown essential pathology. It also demonstrates that we have vastly more to learn of the operation of the immediately exciting causes of allergic reactions.

(8) The endocrine relations of allergy have been referred to repeatedly, but no comprehensive studies are known to me which have sought to elucidate experimentally the mutual influences of the endocrine organs and allergic states. Yet we see rather frequently patients in which endocrine disturbance has an undoubted relation to asthma and other allergic phenomena.

In concluding this section, allow me to say that I have selected eight clinical problems which we all see illustrated repeatedly in our patients, and whose solution is fully as important as the further accumulation of data from routine skin tests. No doubt other such problems will occur to each reader.

#### IV. CERTAIN PRACTICAL OBSERVATIONS DRAWN FROM A SURVEY OF THE PRESENT STATUS OF ALLERGY

(1) I am impressed with the high percentage of asthma patients in whom routine skin tests are usually negative, who secure relief by attention to paranasal sinus infections. This is a point which ordinarily receives inadequate attention. An unusually thorough investigation of these sinuses should be made in every case of asthma and allergic rhinitis. Contact points must be relieved. Contacts may cause asthma as a result of direct irritation, by producing local changes in the mucosa and by interfering with

free sinus drainage. A focal infection fully drained ceases to be a focal infection.

Many times we see asthmatic patients whose noses are pronounced free of significant pathology by competent specialists. Yet ethmoid infection is present and its treatment results in cure of the asthma. Vaccines are usually of great assistance, either routine autogenous, or by Solis-Cohen's method, where swabs are wiped in sterile test tubes, several cubic centimeters of the patient's blood are added, and a vaccine is prepared from the dominant growing organism. Dr. H. Y. McNaught has called special attention to the importance of cryptic ethmoid infections in this connection. We have a considerable series of patients where treatment along these lines has resulted in relief and cure. Some of these patients give positive skin tests to foods or epidermal or miscellaneous antigens, but treatment in line of the skin tests gives no relief.

(2) While it is true that climate may influence asthmas chiefly in a secondary way, by its relation to bacterial respiratory infections, or to dusts and pollens, nevertheless we should not be too hasty in dismissing other effects of barometric pressure, humidity, temperature, sunlight, and winds. Little accurate information is to be had on these points (even the influence of varying partial pressures in asthma being virtually unknown).

(3) We need to know more about the influence on allergic states, especially asthma, of such things as anesthesia, biliary jaundice, protozoal infections, and specific disease such as malaria and septic infections.

(4) We need particularly to remember that allergic phenomena are remarkably long-lived, and while easily influenced by numerous therapeutic procedures, tend to recur and relapse. It is a matter of common observation in special clinics as well as in private practice, that our patients have usually been treated already by a varying number of methods with varying degrees and durations of success. In asthma especially is this true. This point is emphasized in the second place by the numerous agents and methods recommended in medical practice for treatment of asthma, and in the third place is distinguished by the weird variety of patent medicines and nostrums advertised for its relief. Such a condition does not obtain in malaria or other diseases where we have specific remedies. These considerations illustrate the necessity of getting what Dr. Charles Miner Cooper calls a longitudinal section of the patient. Sir James McKenzie followed heart cases twenty-five years to reach valid conclusions. A similar method in asthma would save much space in periodicals and would greatly enhance our actual evaluation of treatment. We need records of immediate data, but we sorely need more complete histories of later progress. The same consideration has been forced on us in the case of such diseases as syphilis and amebiasis.

(5) We all recognize the great contribution to our knowledge made by the comparative standardization of skin antigen reactions. We have welcomed, too, improved methods of manufacture and efforts by many workers, to secure the exact type and quality of antigens which may be at fault in a given patient in a given locality. This detail is valuable

and important. We must not, however, forget that the method of antigenic skin tests has merely opened a gate through which we can proceed to a closer study of this huge subject.

(6) In asthma, especially, because of its chronic and relapsing nature, patients naturally grasp at every straw and seek any method, no matter how absurd or useless, that promises relief. We have to remember the profound psychologic influences often so easily brought to bear on asthmatics. Optimism and encouragement are easily engendered with the suggested hope of cure. Such factors, added to a substratum of empirical therapeutics and utilization of what really scientific knowledge of allergy is available, leads the practicing physician face to face with two serious dangers. These dangers we see exemplified in the daily press on the one hand, and in medical literature on the other. The first danger, to which true physicians are not prone, is that of unmitigated commercialized quackery. This is flagrantly illustrated in various advertising institutions and individuals. The second danger is that of more or less unconscious exploitation of patients on the same premises as above, accompanied by an overly optimistic judgment of results obtained. We must guard against these easy tendencies, endeavor to maintain an impersonal and judicial attitude toward the facts, and realize the urgent need of greatly broadening our allergic horizon.

#### V. CONCLUSION

While the absolute or underlying essential pathology of allergy is unknown, we have now definite lines of approach to an understanding of it. One of these is the use of skin antigenic reactions. We have reviewed some of the outstanding problems of allergy in clinical work and have recorded a few observations on the present status of allergy in medical practice. It is essential to broaden our observation and research. W. L. Brown has recently (*Brit. Med. Jour.*, Aug. 29, 1925) given a summary of the treatment of asthma which we might well extend to the treatment of allergic states in general. Brown summarizes the treatment as follows: Study the psychic features of the patient; remove peripheral sources of irritation, especially in the upper respiratory tract; develop respiratory intake by chest exercises; desensitize (or immunize) when possible; restore balance in favor of the sympathetic system; attend to the general hygiene. These are the best treatment rules I have seen.

Keeping up on current literature, either medical or general, is a physical impossibility; and those who make the attempt will spend every spare moment at it and will still miss much that is good. He will also miss much that is different, and much that is bad. His bereavement is not without a silver lining. When it is once realized that keeping up on current literature is an impossibility, the thought at once occurs, "Why not miss a little bit more current stuff and have time to enjoy a few things which have been proved to be classics." This is the only way out of a bad situation. Reading time to be most effective must be budgeted, and the budget should make ample provision for a careful reading of the classics—at least those which prove most interesting. To miss any good current material is lamentable to be sure; but to miss all the gems of past ages is a tragedy.—Bull. Wayne County Med. Soc.

### THE NEURASTHENIC PATIENT

By OSCAR F. JOHNSON \*

*If we look, look long and thoroughly, we will find that our neurasthenic patients are sick. I believe that there is a physical basis for most patients' complaints, and when we say that a patient is a neurasthenic, it is a refined way of confessing our ignorance.*

*I believe that true neurasthenia is one of the rarest of diseases. When we examine a patient who suggests neurasthenia, in all probability there is a physical cause for his condition.*

DISCUSSION by Julian Mast Wolfsohn, San Francisco; R. A. Cushman, Santa Ana; Edward D. Kremers, Pasadena.

WITH our present knowledge of disease we may say that all human ills may be divided into three groups: To the first group belong those that have a known biological basis, such as typhoid, tuberculosis, malaria, etc. To the second group belong diseases which have a well-known histopathological basis, but whose etiology is generally unknown, such as cancer, arteriosclerosis, nephritis, etc. To the third group belong diseases which up to the present have no demonstrable pathology, such as neurasthenia, hysteria, and the various psychic disturbances. These groups are gradually and steadily changing for the reason that our diagnostic armamentarium is becoming more and more a means of precision and accuracy.

Let us for a moment analyze the neurasthenic patient; let us come to a comprehensive understanding of his textbook characteristics; and then let us draw conclusions. We are told by such men as Dercum and Beard, "in neurasthenia we find an individual who has lost a large part of his stamina." He is one who often has an imaginary ailment for which there can be found no local biological explanation. This is called irritable weakness. Neurasthenia is said to be present among people who have exhausted their reserve, and who believe they have malfunctions of certain organs or tissues. The neurasthenic is typically one who is introspective, one who thinks about his ailments to an abnormal degree, and whose life and actions are colored and made sordid by these so-called imaginary ailments. We find neurasthenia among women who, because of excessive and laborious work, use up their reserve strength, who in due course of time develop headaches, backaches, numbness, and all manner of obscure symptoms, such as tingling, heat, cold, tightness, etc. And so using the information given by the older writers we have a vast group of symptoms. These older writers were specialists, their capacity for detail made them geniuses in their respective fields. Their patients had been selected, and reselected from among a large group of patients. The typical and genuinely neurasthenic patient is hard to find, and if he is a true neurasthenic, according to the older authors, there is no physical basis for his complaint.

But are we competent to judge when a patient is a neurasthenic? We have gone entirely too far and have been unjust to too many patients who were really and fundamentally ill. Neurasthenia has be-

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come a word that has lost its meaning; it has come to be a word synonymous with ignorance. It is often far easier to say that a patient is a neurasthenic than to diagnose a deep-seated and obscure disease. We have a host of new discoveries based upon our newer findings in endocrinology. We have startling new discoveries in disturbances of the sympathetic system, which gradually and steadily make our diagnostic opinions more accurate. It is the purpose of this paper to draw attention to this great medical condition that we call neurasthenia, to view it from an angle seldom mentioned in our journals, and almost never in our textbooks.

I shall enumerate five "typical cases of neurasthenia" that have come under my personal observation: patients unmistakably neurasthenic, and from these histories the theme of this paper may be easily deduced. These five patients do not represent all the neurasthenics that have been under observation; they have been chosen, rather, to cover the general field of medicine.

#### CASE HISTORIES

CASE I. An American sailor, age 26. Patient came to the office in 1922, complaining of nervousness. Four years ago patient fell and struck his head and was rendered unconscious. About the same time, or shortly thereafter, he had an attack of influenza. Since this time he has had a feeling that the top of his head was diseased, that there was a concealed fracture, and that from his head certain peculiar cloudlike sensation emanated. He believed he was going to lose his mind. When looking at the floor, the floor would seem to arise and oscillate back and forth. When he was thinking and talking, great varieties of thoughts would pass through his mind before he could give expression to them. He was apprehensive. He was afraid to be alone, and would stay up until he was so tired that he would fall asleep in his chair. He never allowed himself to be in a room alone, and whenever possible he spent his time with other people. His conversation was continuously about himself. He gave a history that at the time he was in the navy, and since then, he had been under constant medical care, had always been treated as a nervous individual and had been given medicine of every kind to quiet his nerves. The patient was given the ordinary routine examination, and the first thing discovered was that he had a fever of 99. A more careful examination revealed that the patient had an active pulmonary tuberculosis; that tubercle bacilli were found in his sputum and cavities were present in both lungs. He was suffering from a toxemia, the direct result of his tuberculosis. This patient was a neurasthenic, had been treated for neurasthenia, but his physical illness had been overlooked.

CASE II. An American housewife, age 46, complained that for the past several months she found it difficult to swallow, or to talk, and at times as she swallowed, the food would lodge in her nasopharynx. At other times, during her conversation, she found it difficult to articulate, and as she thought of these things articulation became more difficult. Her history was not typical of any physical disturbance. All physical findings were negative. She was examined by a nose and throat specialist, who found her throat normal. Every laboratory test was negative. She was diagnosed as a neurasthenic. It was suggested that a psychoanalysis be done, to determine the complex or the psychic basis for this peculiar dysarthria and dysphagia. The patient was treated by psychoanalysis, and this interesting psychic complex was revealed: About fifteen years previously the patient had made an unfortunate marriage. Her married life was intolerable and it was impossible for her to continue living with her husband. A child was born, and later the patient was divorced. She eventually married again, and after her second marriage she consulted her priest, who informed her that she committed a wrong when she left her first husband. Certain other restrictions were

placed upon her. She had told her child that her first husband was dead. The patient knew that her first husband was apt to return any time to see or claim the child. She knew that her life was in constant and violent contradiction to the dictates of her church. She was, therefore, living in a constant physical and spiritual dread. At every meal when she sat down with her husband these unpleasant thoughts would recur, and one would be justified, from a medical or physical standpoint, to say that here was a true psychosis based upon a deep and hidden complex. A physician was called in consultation, and he gave this advice: If a great shock could be induced, or the patient given a therapeutic trauma, in all probability she would improve. It was obviously impossible for us as physicians to remove the cause of her worries. The patient was brought to the operating room in order to give her the benefit of a profound impression, an anesthetic was given and a bronchoscope passed. But in passing the instrument the larynx and trachea were examined, and the patient was found to have a cancer of the larynx. This case illustrates a neurasthenic who was seriously and hopelessly sick, but had a textbook picture of a psychic or neurasthenic background.

CASE III. An American printer, age 64, was first seen with what appeared to be an acute attack of cholecystitis. Under diet, sedatives, and simple therapeutics the patient improved. Shortly thereafter he became hoarse, and in a few months he developed a peculiar and constant pain in the posterior mastoid region. All physical findings were negative, except for one or two bad teeth and a rather low blood pressure. The patient was advised to have the teeth treated, because it was thought that his pain was due to a neuralgia secondary to a focus of infection. The patient disappeared. About sixteen months later he returned with a history that he had been to chiropractors, specialists, and mineral springs, with no relief. His employment had consisted of very unpleasant work. He was tired, in search of sympathy, and would sit for hours waiting for a chance to tell his tale of woe. There were domestic difficulties and the patient got no sympathy at home, or from his new faith, Christian Science. The patient had had his uvula amputated twice, because of his cough; had been advised that he had an infected antrum, and that an operation might be beneficial. He gave the information that he had been seen by two syphilographers and had been told that he had no syphilis. Information from a member of his family was to the effect that he loved to go to doctors—in fact, his whole family were neurotic and were not self-reliant. But in spite of the patient's many explorations in the different medical worlds, he continued to complain of pain in his neck. The second time this patient came to the office his physical condition was about the same as when first seen sixteen months before, the difference being that his doctor dreaded more than ever the ordeal of having to hear the long story of his misfortunes. The patient this time was given a very careful examination, and it was found that he had a widening of the sternal dullness, a tracheal tug, and other evidences of an aortic aneurism. X-ray corroborated this finding. The Wassermann report was weakly positive. This neurasthenic patient had an undiagnosed aneurism as the basis for his neurasthenia, and had spent sixteen months or two years in going from one doctor to another.

CASE IV. Miss E., a foreign-born domestic, suffered from backache. She was examined by orthopedic surgeons, but no cause was found for her backache. She was referred from one department to the other of a general hospital. Finally, after having been given the benefit of immobilizing supports and suggestions from the various departments, the patient was sent to the neurological department to determine the type of psychosis from which she suffered. The various specialists had each examined her various organs, which they found to be normal. The outpatient department of neurology sent her to the hospital for study. From what psychic condition did she suffer? Why did her mind function in such a way that she should believe her back was diseased? Physical examination was negative; catheterized bladder specimen showed blood in the urine. Radiographic examination of the ureters showed two small shadows in the right ureter.

Another neurasthenic patient who was not neurasthenic, but suffering from an actual physical cause.

CASE V. An American farmer, age 57, who about two years before had been ill in a hospital with bilateral neuralgia of both arms. He had at this time been very sick, and had been given quantities of morphine to quiet his pain. Patient stated that since this time he had been unable to work, read, or concentrate on any one task. His wife did all the work. His insurance company sent him to a specialist for diagnosis. In brief, the result of the specialist's examination was this: "The patient is a neurotic, he is lazy, and no medical care or insurance is recommended." This patient when examined showed a most perfect example of the late effects of lethargic encephalitis—the mask-like face, sluggish cerebration, typical walk, with the customary negative laboratory findings. He had been called a neurasthenic because it was a convenient diagnosis. Yet for three years the family had gotten no insurance, and the patient had been the object of ridicule by his neighbors and acquaintances.

The above five cases were selected because they were recognized as neurasthenics by one or more physicians and because I had personally seen them and had at first also thought they were neurasthenics.

#### DISCUSSION

JULIAN MAST WOLFSOHN, M. D. (490 Post Street, San Francisco)—Doctor Johnson has called to our attention, at a very opportune moment, a subject which, to me, has always been one of the weak points in the education and practice of physicians.

The diagnosis, neurasthenia, has been a cloak which shielded the ignorance of an accurate diagnosis. For the past thirteen years I have never seen one patient whom I conscientiously could label neurasthenic according to Weir Mitchell's classification. How much better it is to admit one's diagnostic weakness and label these cases Neurasthenic States—Cause (?). Neurasthenic state is a bodily condition, not a mental one, and depends on errors of metabolism.

The diagnosis of neurasthenia is usually the result of errors of omission in observation rather than errors of commission.

No doubt as we look back over our files we can find cases similar to those Johnson has portrayed to us. Within the last year I recall two patients treated as neurasthenics, each of which had early dementia paralytica. The physician had neglected to make a Wassermann test, because he took for granted the patients' positions as respectable housewives. Another class of neurasthenics suffer from traumatic neuroses. These are common. I have seen no less than ten this year, every one of whom had had previous head injuries with no demonstrable physical defect.

Some of us are coming to believe that there are molecular changes in the nerve parenchyma and disturbances in the cerebral circulation, the latter of which are responsible for the headaches, unusual head sensations, insomnia, etc.

One word must be said about the patient who, on the other hand, is treated for organic disease, but who is really suffering from psychic neurosis. This is a pitfall which, in the majority of instances, is just as avoidable as the diagnosis of neurasthenia when a patient has an organic basis for her complaint.

It would be a good idea, I believe, to eliminate the diagnosis of neurasthenia from textbooks, and apply the suggested term neurasthenic state. This would suggest an attitude of investigation toward the patient's symptoms.

R. A. CUSHMAN, M. D. (Santa Ana)—Doctor Johnson does well in urging us to be extremely painstaking in search for the cause in each case of neurasthenia. The typical neurasthenic usually presents such a mass of more or less distinct subjective symptoms and so few obscure objective ones, that one should be ever alert to discover and remove the offending cause.

An individual believes himself to be healthy as long as none of his physical or mental activities impresses themselves upon his mind as being abnormal. If he is a person who reacts excessively to physical or mental

stimuli, a symptom or sensation will impress itself upon him more profoundly than if he reacts as does the more moderate, average individual. One person may have a much diseased organ or function, but consciously or unconsciously does not allow this condition to affect his customary activities; while another person with the most trivial ailment will suffer apparently great physical or mental disturbance. It is the difference in the individual make-up that determines whether he will ignore malfunctions or suffer from them.

While in the main I agree with the essayist that many malfunctions are diagnosed neurasthenia which are, in fact, symptoms of some organic disease that has been overlooked, still I am old-fashioned enough to believe that quite a percentage of symptoms complained of do not originate in any so far diagnosed cause. Many of these patients crave sympathy, are fundamentally indolent, and apparently enjoy bad health. They have built up a complex that exists as an entirety with but slight, if any, foundation of real disease.

This statement seems to be borne out by the history of many who fall into the hands of non-medical cults and apparently receive so much benefit. For we all know that there is absolutely nothing in the practice of these fads that would relieve a diseased physical or mental situation, except to influence the point of view of the patient upon his condition.

I agree with Doctor Wolfsohn that many of these so-called neurasthenics are really suffering from some psychopathic state rather than a disease of the organs to which the patient may refer as the seat of his trouble.

When these patients present themselves for treatment, it goes without saying that a most careful, repeated search should be made for the underlying cause; but bear in mind that for want of a better term, there may be many whom we shall have to class as "neurotic" or "psychopathic."

EDWARD D. KREMERS, M. D. (Las Encinas Sanitarium, Pasadena)—Doctor Johnson's article is a plea for more accurate diagnosis and, I think, there is no disagreement with this plea. The term "neurasthenia" is an old one and is generally used to denote great exhaustion, both physical and mental, of a well-known kind. In some instances perhaps a better term would be psychasthenia, or the simpler term asthenia. It is not necessary to quibble over terms and I agree entirely with what Doctor Wolfsohn and Doctor Cushman have said.

Not many of us will deny that there is such a thing as a psychoneurosis; that there is a psychogenic factor in illness; and that many sick persons are restored to health by an appreciation of and a correction of psychic difficulties. Patients may be harmed by a lack of appreciation of their true disorders, and this is also a fault in diagnosis. People vary greatly in their make-ups and react in various ways to strain of various kinds. Nervousness in patients does not necessarily mean inferiority. I am fond of saying that all of us are more or less neurotic and that any one of us may show signs of nervousness under certain excessive strain. There comes a time when circumstances are too much for the individual, and wrong methods of thinking will often be found as a causative factor, though perhaps not the only factor. It is wise to attempt to divide illnesses into functional and organic. We will understand them better if we do this. Both varieties may be found in the same patient and the same illness. An organic condition may be found with a functional one, and vice versa. Tuberculosis or syphilis may be found in a neurotic and need not be the cause of the symptoms of which the patient complains. Many patients who are substandard physically and inefficient for one reason or another become neurotic.

What practical things are there in this discussion? There are many, and a few points may be set down. These are given because we sometimes need to be reminded:

1. In the examination of any patient, try to be thorough. Take careful histories, which often must be searching, and do careful routine examinations. Keep records.
2. In the care of a patient, do not forget that there may be changes in condition.
3. Study patients with an open mind. Be objective in investigations. Do not be surprised to find things that were not expected.

4. In dealing with the neurotic, it is especially important to be honest, careful, kindly and patient. If you haven't time to listen to him, refer him to one who has. Otherwise he may land in the hands of some unscrupulous practitioner.

5. Be cautious about recommending surgery for the neurotic. Be sure that this is necessary.

6. Try to be optimistic with the neurotic person. It is easy to get discouraged, but hard to regain a courage once lost.

I think we are all agreed on these things, but I also think it is well to discuss them.

### THE PROBLEM OF PROLAPSE IN YOUNG WOMEN WITH CYSTOCELE AND RECTOCELE

By FRANK W. LYNCH \*

*I desire to stress the importance of prophylaxis in preventing marked vaginal tears during labor; of postnatal care and pessary support; of proper selection of cases for operation; of treating cystocele and rectocele by surgery while the lesion, although sufficient to demand treatment, is fairly simple; by the greatest care in conducting the subsequent labors of such women; and by the greatest respect for the peritoneal cavity of the individual when treating uterine displacement.*

DISCUSSION by Frank C. Ainley, Los Angeles; Titian Coffey, Los Angeles; Alfred Baker Spalding, San Francisco.

FOR a number of years it has been well known that pelvic fascia may rupture at various places during labor and allow the development of the various pelvic hernias known as cystocele, enterocele, rectocele, and procidentia. The resultant hernia varies. When the rupture is chiefly in the bases of the broad and uterosacral ligaments, the resultant deformity is prolapse of the uterus, and since the pubocervical fascia supporting the bladder runs into the bases of the broad ligament, any prolapse of the uterus is accompanied by dropping of the bladder. When the fascial tear is between the bladder and cervix, the essential lesion is a cystocele; and when immediately behind the cervix, a rectocele. The details of the supports and lesions of the pelvic floor have been elaborated to Americans chiefly by Halban, Tandler, Martin, Frank, Watkins, Ward, Spalding, and a few others.

These hernias can be cured only by fairly extensive surgical procedures, necessitating much care and detail in technic, although they rarely restore the overstretched, torn or atrophic meshwork of fascia and muscle to anatomic completeness. Large hernias in young women are most difficult to cure unless the vagina is unduly narrowed. Consequently, the wise physician will aim to avoid such mutilating procedures by seeking to cure the process while it is in the earlier stages, unless it can be controlled by pessary treatment until the patient has passed the child-bearing period.

The rational way to prevent prolapse is to improve obstetrics and make procidentia a compara-

tively rare finding. There is no doubt but that this can be done. We cannot overemphasize the necessity of keeping the bladder and rectum empty during labor, of rupturing the membranes at the beginning of the second stage of labor, of restricting any voluntary bearing down, or attempts at delivery, until the cervix is completely dilated, of primary repair of cervical lacerations, and of making episiotomies and building up the perineum in layers at the conclusion of labor. Nor can we overstate the value of the kangaroo walk as a routine treatment for the first month after the woman has returned to her home.

Good obstetrics also demands postnatal care for an entire year following labor, during which time cervical eversion should be cleared up by cauterization and uterine displacements should be sought for and corrected when found, and held in place by pessary treatment maintained for an entire year. In case of doubt, pessary treatment is a wise procedure. It will do much to restrict symptoms from slight injuries to the fascia and often prevent the necessity of operating at all. We have demonstrated to our complete satisfaction that pessary treatment maintained for one year after labor will reduce the incidence of retroversion to 50 per cent of that now actually found.

Fascial injuries occur chiefly in first labors, and in primiparous women we therefore find the best chance for postnatal care. In any case presenting lesions which result from the trauma of labor, there is a long period during which the injury does not give compelling symptoms. Proper dietetic and hygienic care may accomplish wonders. Cystocele and rectocele develop as sliding hernias starting as small deformities which gradually increase in size. It is common knowledge that complete procidentia does not develop usually until the woman is past the menopause. The surgeon should operate while the case is relatively simple and not await the development of a complete prolapse, provided that the hernia is developing and causing symptoms and the condition does not respond to nonsurgical methods. Yet the surgeon should use the greatest caution and restrict his plastic work upon child-bearing women to the lowest possible per cent. I feel that in any case he should await the development of symptoms and not be guided entirely by anatomic considerations. If, however, the condition of the woman demands operation, he should proceed confidently since a good repair should withstand the strain of nearly any labor that has been intelligently treated and has been followed by proper postnatal care. If the repair is stretched out I see no objection to a secondary repair immediately following delivery if the patient's condition permits. We have made without any bad results many secondary posterior repairs immediately following labor upon women who first came to us in pregnancy with relaxed vaginal outlets. Personally, I have delivered scores of women following secondary repairs and suspensions without return of the hernia or retroversion or retroflexion. If operation is really necessary, enough should be done to cure the patient. The operation should not be restricted necessarily to lower work.

In our experience, prolapse of the uterus is always attended by some degree of cystocele or rectocele,

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although either rectocele or cystocele may occur independently of prolapse. Care must be used in ascertaining the condition of the cervix because a hypertrophied cervix associated with cystocele and rectocele is often mistaken for prolapse. Prolapse, plus cystocele and rectocele, cannot be successfully cured in young women by repair of the cystocele and rectocele alone. Prolapse almost invariably occurs in women whose uterus is markedly retroflexed. Our follow-up work has demonstrated that retroversion-flexions developing as a result of labor are due to lacerations in the cardinal ligaments. These cases always exhibit some degree of descent, and constitute a group which sooner or later develop symptoms as a sequence to the lesions. The primary step, therefore, should be a well selected round ligament operation, performed, however, after the lower work has been completed.

There are four classes of round ligament operations, divided (1) accordingly as the round ligament is shortened to pull through the inguinal canal, the Alexander and its modifications by Simpson, Barrett, Mayo, and others; (2) accordingly as the uterus is suspended from the abdominal wall, the Olshausen method or some one of its modifications as the Gilliam, etc.; or (3) as the uterus is supported by the plication of the round ligament in front of the uterus as the Coffey suspension, or plicated behind as in the Webster. Ventrosuspension should not be considered as it is not a proper operation. Personally, we have utilized at various times the Alexander as modified by Simpson, the Olshausen as such and as modified by Gilliam and others, the Coffey, Webster, Mann, and a plication operation which we ourselves described. However, we have found that no one operation serves for all cases because of the varying condition of the round ligament, the different angles in which the inguinal canal comes into the abdominal cavity, the varying firmness of the attachment of the round ligament in the canal, and the different types of insertion of the round ligament into the uterus. The frequency of the fanshaped uterine insertion which really pulls only from the bladder level has not been properly emphasized. The Webster, when possible, is the operation of our choice, since there is no other procedure which elevates the uterus and ovaries in as satisfactory a manner and holds it forward in flexion without kinking the tubes. The objections to the Webster are based entirely upon a faulty understanding of the method of performing it since, unfortunately, Webster never described the improved method which he used following 1908. There are many cases, however, in which the Webster operation should not be done. It is not applicable to cases of retrodisplacement which, although presenting symptoms as a result of the trauma of labor developed originally on a congenital basis, or in cases in which the inguinal canals are not normally placed. In such cases we use the Olshausen modification, reserving the Coffey for those in which there is need for peritonealization to the anterior uterine wall. The uterosacral operation as ordinarily done is valueless since it utilizes only peritoneal folds. We have invariably found that, when opening the abdomen of cases upon whom this operation had been performed, the folds had stretched and that the

fixation suture could be demonstrated in the uterine part of the fold. The true uterosacral lies so deep that it cannot be utilized as a support to hold the cervix back without extensive dissection and considerable bleeding if the work is done from above. By making use of the anatomic facts noted above, we have operated since 1919 without recurrence of retroversion. Before that time, we had 3.3 per cent in 192 cases followed one to three and a half years.

Personally we are unable to appreciate that recurrence frequently follows cystocele operations. We have followed up our patients for years and find no recurrences unless there were complications in subsequent labors which fortunately have been very rare. In our technic, the vaginal aspects of the bladder are completely exposed by separating the fascia underlying the anterior wall well to the side after which the redundant tissue is excised. The bladder is then separated from the uterine wall as high up as seems necessary. It is then held up out of the way while a new base is made by fixation sutures. These sutures run through the anterior margins of the bases of the broad ligaments and include the uterus so as to form a firm shelf upon which the bladder now rests. We do not emphasize the importance of the so-called bladder pillars since they are so often attenuated. Broad surfaces of the cut edges of the fascia and vagina are now united by a double layer of chromic sutures. The success of the operation depends upon a proper elevation of the bladder and wide flaps to ensure a broad and firm fascial union. Postoperatively, the patient is catheterized frequently. We feel that much depends upon frequent catheterizations since we thus avoid straining the sutures from the impact of a half distended bladder during vomiting.

In this discussion we have not considered cervical repairs which form no part of this symposium. If the cervix is hypertrophied we resect it by Martin's method before doing the cystocele, aiming to avoid amputation if it is possible.

Rectoceles are treated in a manner similar to the cystocele, the repair consisting in uniting wide fascial flaps. The importance of secondary perineal repair has been exaggerated in the past. A repair of the perineum does not aid the cure of a high rectocele. If repair work is limited to the perineum, the operator will be chagrined to see a rectocele redevelop above the line of his closure. Our incision, therefore, in high rectocele, runs in the midline as far up as the cervix. The tissues are separated with dissecting scissors, making wide flaps of fascia on each side. This completely exposes the anterior portion of the rectum. If an enterocele is present it is closed after dissecting and cutting away the capsule of the hernia, after which a rectopexy suture is inserted through the margins of the uterosacral ligament bases and the outer margins of the rectovaginal fascia so as to elevate portions of the rectum in each bite. The lower end of the incision is closed to restore the central tendon of the perineum in the manner developed by Ward and Watkins. Here again the fascia is united in layers, placing the sutures fairly closely together. The repair is essentially fascial, and muscles are not isolated for the closure. Our results are excellent, only one recurrence in fifty-two complete prolapse cases after five

years standing, this being a woman of seventy-two, in whom there was need for haste in operating. The unions, however, are not invariably as firm as in cystocele because it is impossible to keep the rectum empty. If there is too much resection the vagina is unduly narrowed. Starvation observations have shown that feces accumulate in the ampulla of the rectum even as late as eight days after the last meal. Therefore, it seems impossible to diminish the down-thrust of feces upon sutures even though the patient be placed upon a nonresidue diet. Every now and then some suture will wear through. The bowels are kept locked for five or six days, and are opened from above after two oil enemas have been given. We know our operative results because of a follow-up which brings 90 per cent of these cases back for repeated observation.

#### DISCUSSION

FRANK C. AINLEY, M. D. (1136 West Sixth Street, Los Angeles)—Doctor Lynch has presented his view concerning the problem of prolapse in young women, its etiology, its prevention, and its cure, in a concise and convincing manner. Cystocele and rectocele are forms of hernia and by keeping this point in mind we are able better to handle the problem. The general body tone which depends upon good health is of the greatest importance, and the general hygiene and building up of a patient is too often neglected, not only after confinement, but even more so before confinement, as well as before and after secondary repair work.

Lynch properly emphasizes the importance of avoiding voluntary bearing down attempts at delivery before the cervix is completely dilated, and also the advantage of doing an immediate restoration of the perineal body in layers, immediately after delivery with the aid of episiotomy. His results in cases of delivery following operation are unusually good, and one is pleased to note that this notwithstanding, he points out the wisdom of seeking in certain cases the control of symptoms by treatment, rather than operation, until after the patient has passed the child-bearing period. This latter course can be followed to the distinct advantage of the patient in many cases.

TITIAN COFFEY, M. D. (Medical Office Building, Los Angeles)—Prevention as stressed by Doctor Lynch appears to me the keynote of this paper. Intelligent and proper care of our patients during delivery and follow-up observation after confinement are absolute essentials if we are to avoid the conditions under discussion.

A sufficiently deep median episiotomy done at the proper time is a tremendous factor, saving the integrity of the perineum and preventing pushing down and overstretching of the anterior vaginal wall. When the latter becomes edematous and begins to protrude before the caput appears we may rest assured the tissues are unduly stretching and great damage is being done before our eyes. Proper episiotomy, thereby gaining additional room below, promptly relieves this strain and hastens delivery.

Another important factor is the ironing out of the perineal floor as advocated by Potter before his version and extraction, preceding all forceps deliveries. Irreparable damage is done the pelvic tissues by dragging the occiput forcibly over them before proper preparation.

Too many women unfortunately resume their household duties and are on their feet too soon after confinement. This again is a factor by causing weight and increased congestion of tissues below par. Hence the advantage of exercises as a preventive measure, such as knee-chest position and kangaroo walk, thereby decreasing the pelvic congestion, relieving weight and toning the tissues, also the wearing of a properly fitting supporting belt for at least two months following confinement.

Pessary wearing is a valuable asset in aiding us until the tissues have recovered their tone. The future comfort of the patient and much operative work will be avoided if Lynch's salient points be kept in mind.

In regard to the question of operative relief each patient presents an individual problem and the choice and kind of operation must be adapted to the findings. Theoretically it is best to advise operation for immediate relief with the danger of subsequent breakdown of our repair in following confinement, though Lynch reports little danger from this, or to make the patient as comfortable as possible with palliative measures until she has brought into the world the number of children she desires? Dependent upon the degree of discomfort suffered by the patient, this question is probably best decided by herself. Personally, I believe, unless the discomfort is very great the patient should have her operative work done toward the close of the child-bearing period.

I quite agree with Lynch that mere correction of rectocele or cystocele will not give satisfactory results, but must be supplemented by some sort of suspension of the uterus.

ALFRED BAKER SPALDING, M. D., (Stanford Hospital, San Francisco)—I agree with Doctor Lynch that young women should receive a full year's treatment after confinement if they wish to avoid pathological changes in the pelvic fascia. The pelvic fascia is merely condensations of loose connective tissue around the blood vessels and nerves which run to the uterus or a thickening of the muscle layer overlying the pelvic muscles. Retroversion of the uterus with cystocele and rectocele is not due entirely to lacerations at the time of labor but depend upon the tissue changes that occur in the pelvic fascia following labor.

I cannot agree with Lynch in what he has to say in regard to recurrences. My experience with clinic patients at Stanford University, over a period of thirteen years, which covers the operative relief of symptoms of something over six hundred patients, convinces me that there is a small recurrence in conditions of prolapse of the uterus regardless of the type of operation done, due primarily to poor fascia. There is about 5 per cent recurrence in regard to cystocele and 13 per cent recurrence in regard to rectocele.

Personally, I prefer to operate upon patients after the child-bearing period and believe that the majority of patients can be well cared for by judicious office treatments until the period of atrophy begins.

DOCTOR LYNCH (closing)—I neglected to state in the paper that our ideas contained therein were developed from a follow-up study of 290 operations for retrodisplacements with vaginal repair, 210 cases of retrodisplacement with removal of one tube and ovary and vaginal repairs. 125 marked vaginal relaxations with cervical injuries, all in women of the child-bearing age, and of sixty-eight complete procidentias, postmenopausal, all operated between 1917 and 1922, a total of 693 operated cases, all followed for periods ranging from a minimum of one and a maximum of eight years. This series represents a follow-up of 90 per cent of all the cases of the same types that were operated in the university hospital in that period.

**Protein Therapy in Eye Infections**—H. F. Shorney (Medical Journal, Australia, February 13, 1926, p. 177), discusses the use of protein therapy in eye diseases, and advocates the use of cow's milk injections, especially in the treatment of gonorrheal ophthalmia. After boiling the milk for not more than five minutes the injection is made deeply into the gluteal region in doses of 2 cc. for a new-born infant, 5 cc. for a child of 6, 8 cc. for a child of 10, 10 cc. over that age, and 15 cc. for adults. Shorney has found the routine use of milk injections in perforating wounds of the globe very useful in preventing the occurrence of sympathetic ophthalmia, and excellent results were obtained in acute inflammations of any part of the uveal tract. He states that an injection given early in wound infection after cataract extraction may avert a pan-ophthalmitis, but that it is inadvisable to give an injection as a prophylactic after every cataract operation with a view to anticipating infection, because the resulting reaction is not good for elderly people. The injections should be given with the usual aseptic precautions. Boiling for more than five minutes coagulates and changes the albumin, interfering with the resulting reaction.—Abstract, Service Bull., Metz Laboratories.



## SOME OBSERVATIONS ON THE INFLUENCE OF BOWEL IRRITATION OVER THE GASTRIC AND DUODENAL REGION

By R. M. CLARKE \*

*Bowel irritation exerts an influence on the stomach, pylorus and duodenum (the ulcer-bearing area).*

*Gastric irritation is thereby greatly increased, due to pylorospasm, secretion retention, loss of duodenal regurgitation, and the usual rest period.*

*"Ulcer symptoms" can result from these conditions without ulcer.*

*Careful bowel management should therefore be a part of the treatment of all gastric cases, especially those with ulcer or ulcer symptoms.*

*It is reasonable to suspect that bowel irritation, such as habitual catharsis or enemas, colitis, fermentation, amebiasis, etc., can cause peptic ulcer.*

DISCUSSION by Walter Wessels, Los Angeles; Eugene S. Kilgore, San Francisco; John V. Barrow, Los Angeles.

IT has long been recognized that irritations and inflammations in the bowels, especially the large bowel, frequently refer their pain and other symptoms to various places in the upper parts of the tract. There are very few, if any instances, of symptoms being referred to a lower portion of the tract. An excellent example of the upward tendency is the effect of irritations in the descending colon in increasing the reverse peristalsis from Cannon's ring back over the cecum.

The influence of bowel irritation over gastric and duodenal functions is another indication of the upward tendency of reflexes in the tract. The tendency of this bowel reflex is to tighten the pylorus; the influence may come from any part of the colon, but rises mainly, I believe, from the ileocecal region. There has been, and still is, a great tendency to diagnose as gastric diseases symptoms that are only reflex evidence of bowel irritation. Our only means of getting away from this is a better knowledge of the physiology of the tract.

### PYLOROSPASM

This tendency of the bowel reflex to tighten the pylorus entails many evils. The emptying time of the stomach is one of the first things to suffer. The distress after eating, from which so many bowel trouble patients suffer, is in quite a measure due to this pylorospasm and inability of the stomach to start its emptying time as it should. In other words, the intragastric pressure is increased by a tightening pylorus and an increasing gastric wave. The presence of a barium residue in the stomach after four or five hours, in the absence of obvious ulcer, gall bladder disease, and other local pathology, is in itself highly suggestive of bowel irritation. The power of this reflex from bowel irritation over the pylorus, is indeed astonishing when we consider the length of time it takes some stomachs to empty themselves in its presence.

### LOSS OF RESTING PERIOD

A general physiological requirement of active tissues and organs is periodical rest, that is, sleep for

the brain, diastole for the heart. The stomach is no exception to the rule and normally has its periods of rest. It receives a meal, secretes, digests, empties itself and rests. This rest is attained first, by becoming empty, thus affording relief from food stimulation; secondly, by duodenal regurgitation of alkaline material into the stomach, thus checking its motor and secretory activity and enforcing rest.

### SECRETION RETENTION

There is thus, not only, (1) a delayed emptying time; (2) the loss of the rest period; (3) the prevention of duodenal regurgitation, but we have also (4) a secretion retention. There has been, and still is, a good deal of discussion about hyperchlorhydria and hypersecretion, but their existence is very doubtful. The peptic glands secrete hydrochloride acid in a given amount and rather constantly, but it piles up in amount if the outlet of the stomach is not functioning as it should. Therefore, pylorospasm produced by the bowel reflex has a great influence over the amount of secretion present, its length of stay in the stomach and its ability to irritate this area. For further study of the influence of duodenal regurgitation over the chemistry and function of the human stomach, the reader is referred to the literature on the subject which is very interesting. Spencer, Meyer, Rehfuess, Hawk, Carlson, Baldyreff, and others, provide us with studies of great importance.

### ULCER SYMPTOMS WITHOUT ULCER

For years it has been taught that there is a "classical syndrome" for ulcer. That is, pain when the stomach is empty, food and alkali relief, and returning pain with an empty stomach. These symptoms may be present with ulcer, but evidence is constantly increasing to show that they frequently exist without ulcer. In other words, with pylorospasm and secretion retention present, it is easy to understand how there can be such irritations when the stomach is empty, and also that pain will be present that can be relieved by alkalies. This is fact—does often happen. These patients find great relief by management that quiets the bowel irritation. Such management relaxes the pylorus and permits duodenal regurgitation once more, thus re-establishing the gastric period of rest, and relieving the irritation to this ulcer-bearing region.

### DOES THIS BOWEL REFLEX CAUSE PEPTIC ULCER?

Bowel irritation can upset the entire tract. I believe its effect is felt mainly in the ulcer-bearing area, and that we have every reason to look upon it with grave suspicion as a prolific cause of peptic ulcer. It seems easier to understand how this irritation can exist in the stomach than in the duodenum. However, the function of the duodenum is also upset and its nerve supply comes from the same sources as that of the gastric mucosa. It is therefore subject to the same influences.

We have other examples of ulceration caused reflexly, and that, too, in the gastrointestinal tract. For instance, the simple herpes labiales occur with bad conditions lower in the tract. These break down into ulcers on the lips that may become very deep. Why is it not just as easy to think that the reflex from bad bowel conditions, that we now know does

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affect the ulcer-bearing area so powerfully, can cause the peptic ulcer? Certainly this is not an unreasonable suspicion.

By careful inquiry the majority of such patients will supply a history of prolonged bowel trouble and it is rare to find a peptic ulcer patient with nothing wrong in the bowel.

Autopsy experiences have taught us that some ulcers heal even without treatment. May not this be due to some happy change in bowel conditions? As explained earlier in this paper patients suffering from "ulcer symptoms," but without demonstrable ulcer, are often relieved by proper bowel management. On account of this I now add to my usual ulcer treatment a very careful bowel supervision in all patients with ulcer.

We had on our service last year thirty-seven ulcer cases. *There was not one patient in the list who gave normal bowel history. They ranged all the way from severe constipation to looseness, with five or six mushy stools a day.*

I submit the following case history as sufficiently illustrating the point in question:

Mr. C., age 39 years, insurance agent, was referred last year by Doctor M., with a tentative diagnosis of peptic ulcer. He gave a history of constipation beginning at 18 years of age, which had continued with an increasing severity ever since. He had been largely dependent upon cathartics during that time, using everything from epsom salts to glycerine suppositories.

After seventeen years of this, at 35 years of age, ulcer symptoms began (that is, same kind of distress for which he came on my service, pain on empty stomach, food and alkali relief, with returning pain on an empty stomach). Over a period of two years he was given Meltzer-Lyon technique for drainage of gall bladder, with no relief.

At the end of this two-year period, at 37 years of age, he consulted a surgeon, who did an appendectomy and a cholecystectomy, and gave the definite report that there was no ulcer or other pathology of any kind. The appendix was removed because "the abdomen was opened," and the gall bladder was removed because "it was thickened."

Following this surgery, constipation was worse than ever, and the symptoms from which he sought relief were unrelieved. One year later he came under my care, with the same symptoms and a large ulcer that was easily demonstrated under the x-ray.

Here we have a man with severe intestinal irritation existing over a period of nineteen years. After seventeen years he began "ulcer symptoms," but had no ulcer, because we have the report of a reliable surgeon who examined his stomach by exploratory incision only two years before he came on our service, and two years after starting ulcer symptoms. Then at the end of this two years we find a large ulcer easily visualized. I believe it is a fair suspicion that bowel irritation caused first, "ulcer symptoms," and two years later ulcer, and that bowel management in time might have prevented the ulcer. This patient is fully relieved and has gained thirty-five pounds in weight, and a large part of his care and treatment is and has been good bowel management.

#### DISCUSSION

WALTER WESSELS, M. D. (1200 South Alvarado Street, Los Angeles)—The fact that pylorospasm results from pathological lesions elsewhere in the abdomen is evident. Whether it can be produced by colonic irritation and inflammation may be questioned.

The term irritation is so elusive that one is at a loss as to its real meaning, and unless colitis or enteritis is meant when inflammation is spoken of, this term is also indefinite. Surely, atonic constipation, for example, is not associated with a demonstrable inflammation.

The reflex pylorospasm accompanying obstipation or impaction, for instance, ceases as soon as the mechanical obstruction is relieved. It stops long before the irritation

and inflammation, if they are present at all, could subside. This would not be true were they the cause.

Then, too, pure nervous phenomena without any irritation or inflammation whatever produce pylorospasm, eyestrain, migraine, fright.

The hypothesis that Clark advances regarding these bowel conditions producing pylorospasm with secretion retention and lack of rest period and in this way responsible for ulcer is, it seems to me, untenable. It would be extremely easy to produce ulcers experimentally on animals by sewing up the rectum. This has been tried but without success.

The analogy of herpes labialis being produced by gastrointestinal irritation is not convincing, for herpes labialis is more frequently associated with respiratory infection than with gastrointestinal disturbances. Furthermore, evidence is not lacking that disease of the nervous system plays a part in this condition as it does in herpes zoster.

Autopsy records do not show the association peptic ulcer with grave colonic lesions, not to speak of irritations.

The great number of chronically constipated individuals without gastric symptoms, as well as the number of peptic ulcers with normal bowels, would incline one to differ with the author as to his conclusions.

His case history is of extreme interest, but not conclusive. We can never be certain that an ulcer is present from x-ray evidence alone, as I am sure many of us have had occasion to observe when the patient was operated upon.

Ulcers heal spontaneously, it is true, or at least ulcer symptoms stop. I have seen symptoms cease when no attention whatever was given to the colon because there was no occasion to do so.

I believe ulcers are due to infective emboli carried to the wall of the stomach or duodenum. Experimental evidence is at hand to prove this. Some such evidence should be forthcoming to establish Clarke's interesting hypothesis. Would it not be well to withhold judgment until experimental evidence supports deductive theories?

EUGENE S. KILGORE, M. D. (490 Post Street, San Francisco)—The stomach has long been recognized as a spokesman for lower parts of the digestive tract and there is no doubt of Doctor Clarke's contention that at least its motor functions are often disturbed by the presence of pathological changes below. The most interesting part of Clarke's contribution, however, is his addition of another theory on the old perplexing question of peptic ulcer etiology. His idea of bowel irritation disturbing gastric physiology with resulting retention, lack of rest period, etc., and thereby causing or at least favoring gastric ulcer formation is quite conceivable, but when applied to the more common duodenal ulcer his reasoning is not clear. And in neither case could the suggestion be considered seriously without a good deal of properly controlled investigative data. One would like to ask, for example, (1) what is the comparative frequency of constipation, etc., in the ulcer group and in a similar group of nonulcer patients; (2) if this comparison seemed to show a significant positive correlation between ulcer and bowel symptoms, do the bowel symptoms antedate the ulcer symptoms with sufficient frequency to suggest the bowel disorder as the primary cause and not the effect (e.g., effect of the patient's dietary efforts to relieve his ulcer)?; (3) what proportion of necropsies of ulcer subjects show bowel pathology, and how does this record compare with nonulcer subjects? The data secured from the patients' histories would require special precautions to exclude subconscious bias on the part of the one who took the histories and who later sorted and graded them for bowel irregularities. And, if all these difficulties were overcome, and a significant correlation between ulcer and bowel irregularity could be demonstrated, one would still have to inquire whether any causal relation existed between the two conditions or whether both might be due to some other etiologic factor.

JOHN V. BARROW, M. D. (2007 Wilshire Boulevard, Los Angeles)—In my observations of the pathological physiology of the abdominal viscera, I am convinced that Doctor Clarke is dealing with a helpful and true clinical principle. Very frequently we see patients in whom the

stomach and duodenum are the points of complaint, while the terminal findings are those of a lower bowel condition. I am satisfied that gastric and duodenal ulcers recover much more rapidly if a goodly part of the treatment is directed toward the colon, and there is at least some reason to suspect that lower bowel irritation may bear a part in the etiology in stomach and duodenal ulcers.

DOCTOR CLARKE (closing).—The etiology of peptic ulcer is a very complex matter and I think all will agree that the last word has not been said upon the subject. *I do not wish to be understood as putting forward a new theory as to the cause of ulcer, thus supplanting all previous theories.* I do, however, wish to say emphatically that I believe the influence of bowel irritation over the ulcer-bearing area is a very harmful one and may cause ulcer. To say the least it creates a condition splendidly adapted to assist the formation of ulcer by embolism or any other means. It is conceivable that embolism could occur in a normal stomach and the resultant ulceration heal spontaneously, causing no trouble. With a pylorospasm present and secretion retention, with loss of the rest period and duodenal regurgitation, the chance of ulceration healing spontaneously is greatly reduced. *In view of this I feel that attention to bad bowel conditions should form a part of all ulcer treatments.*

I notice Doctor Wessels' doubts if pylorospasm can be caused by colon irritation. There are many writers of prominence to cite as proof that others believe and teach it. Charles G. Stockton, writing in "Oxford Loose-Leaf Medicine," emphatically states it in several places. If the doctor wishes the volume and page, I would cite volume III, page 269, under the subhead of "Sympathetic reactions between the stomach, colon and small intestine."

I was impressed very differently than Doctor Wessels by reading autopsy records. I felt they did show the association of peptic ulcer and colon lesions. It is also hard for me to understand the doctor's statement that "atonic constipation is not associated with demonstrable inflammation." It is my understanding that an atonic colon is only a later stage of what was at one time a spastic condition.

I am much interested in the three questions propounded by Doctor Kilgore. These questions I have asked myself for sometime, and I have stated in this paper what I think the answer is. In number one, Doctor Kilgore limits it to constipation, but I think there is often more irritation in conditions of loose frequent stools than with constipation. In going over my records there is an antedating bowel history in a surprisingly large number. I would be more than human if I could claim entire freedom from bias—subconscious or otherwise. Be that as it may, I feel that most all the ulcer cases I see have an antedating bowel story to tell.

Doctor Kilgore rightly suggests that there may be a causal factor underlying both the ulcer and bowel condition, with which I fully agree. I can easily conceive of an endocrine dyscrasia doing such a thing. It may be also that some day it will be shown exactly what that causal factor is.

I have greatly enjoyed the discussion and am pleased to note that Doctor Barrow recognizes some worth in the point I am trying to make in this paper. There are many points that could be taken up in rebuttal, but wishing to keep myself in proper space and proportion I will not attempt anything further.

The medical profession by and large, the world over, repudiates Freud, his theory of the neuroses, and his system of therapy. Psychologists have always denied him, and now artists, litterateurs and critics are beginning to line up with them. To leave this statement unqualified would do Freud an injustice and the public an unfairness. . . . Were they asked whether they subscribed to some of his doctrines it is likely that more than half of them would reply, "I do." . . . Freud has taken a few sick souls and after studying them he has reconstructed a sick world, a horrible world in which no one save a few mystics and monsters want to live.—Joseph Collins, The Dearborn Independent, August 21, 1926.

## SINUS INFECTION IN CHILDREN

By FRANCIS M. SHOOK\*

DISCUSSION by E. S. Budge, Los Angeles; J. A. Connell, Riverside; Rexford Hoobler, Oakland; Clifford Sweet, Oakland.

THIS consideration of sinusitis in children is limited to a series of patients with maxillary antrum infections, varying in ages from four years to twelve which were cared for during the past two years.

Symptomatology—general. The most common picture is that of a child below par physically, with no sharply defined symptoms indicative of the precise location of the chronic infection. This may be illustrated by patient R. B., age 8 years. For several years this child had been under medical supervision. The child was subject to recurrent febrile attacks of unknown origin. These attacks would last from a few days to several weeks, and were marked by prostration and fever. The child was below par physically, and the repeated toxemia had produced cardiac symptoms which indicated myocardial involvement. Repeated physical examinations were negative. On nasal examination a diagnosis of probable chronic low-grade maxillary antrum infection was made because of the constant presence in the floor of the nose of mucopurulent secretion. The diagnosis was confirmed by operative intervention. The after-treatment cleared up the antrum infection, and the results have been very striking. The child has become a normal one as regards physical condition, the febrile attacks have ceased and the damaged cardiac muscle has resumed normal function. Another child, A. B., has been under the supervision of a pediatrician for one year, during which time there were only a few short periods of normal temperature. The abnormal temperature could be explained by a recurrent pyelitis, the etiology of which was finally traced to a chronic low-grade maxillary antrum infection. The diagnosis for this patient was made without any difficulty. The child was a mouth-breather, although the tonsils and adenoids had been removed. The nose was filled with a mucoid discharge, which could be removed in large quantity by a suction pump. The treatment consisted of surgical drainage of the maxillary antrums followed by prolonged after-treatment by lavage of the maxillary antrums. The results have been very good. There has been a continued improvement in the general condition, and the child's temperature has remained normal except during one mild attack of pyelitis and one throat infection. A different phase of this subject may be illustrated by the following: Patient W. C., age 6 years. For the past year this child's mother made the following observations: (1) There seemed to be present a constant "cold" of the nasal variety. (2) The child would awaken suddenly nearly every night and awaken the household with a violent coughing spell. (3) Although in fair health the

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child was not quite up to standard. Careful general examination by the family pediatrician at different intervals showed moderate quantities of mucopurulent discharge on the floor of the nose, with some crusting about the anterior tips of the middle turbinates. Surgical drainage of the maxillary antrums was performed and the usual after-treatment instituted. There was marked improvement and within a few days the night spasms of coughing had ceased. The antrum infection subsided with lavage performed twice a week. The history of K. O. is an illustration of the type of maxillary antrum infection in children which simulates a sensitization. Age at time of original examination, 6 years. Symptomatology—repeated attacks of coryza and bronchitis. There was present impaired nasal respiration, which was very pronounced at night. The tonsils and adenoids were removed, with some improvement. The patient's postnasal adenoids were removed twice at intervals of about six months with some improvement each time. After it was definitely established that there would be no recurrence of the postnasal adenoid, nasal examination showed mucopurulent secretion on the floor of the nose, with slight crusting on the anterior tips of the middle turbinates. This child was then kept under observation for about two years, during which time repeated general and special examinations were made, and climatic, dietetic and local treatment instituted. The symptomatology remained about the same. There was frequent sneezing spells, recurrent attacks of bronchitis and constant mucopurulent discharge. The child's general condition remained below par, and she belonged to the group known as the "nervous" child. Surgical drainage of the maxillary antrums was performed about a year ago with very good results. Since then there has been about 80 per cent improvement in the symptoms.

Another interesting history is that of the patient V. G. At the age of 3½ years the patient had an upper respiratory tract infection which was followed by a thick, greenish mucopurulent nasal discharge. The maxillary antrums were irrigated at this time under a general anesthetic of short duration. The child remained in fairly good condition for about nine months, when there was another upper respiratory tract infection with a complicating middle-ear abscess. The child's health was then fair for about six months, when there was a febrile attack of unknown origin accompanied by convulsions. The temperature rose to 105.6 degrees, and some months afterward there was a similar attack which did not subside completely. The child's temperature rose from 100 to 101 degrees nearly every day, and the general physical condition was poor. A diagnosis of maxillary antrum infection was made on account of the presence of mucopurulent secretion of varying amounts in the nares on repeated examinations. In November, 1924, surgical drainage of the maxillary antrums was performed. The results were not very good, and in January, 1925, another general anesthetic was given and the surgical work repeated. Since then the antrums have been irrigated twice weekly. At first there was present in the antrums a large quantity of mucopurulent discharge. At present this has disappeared, and there

has been an astonishing improvement in the child's condition. The temperature is normal, weight and strength have been regained. The after-treatment of patients with these infections is sometimes tedious and prolonged, and results are not apparent for varying lengths of time from a few weeks to several months after surgical intervention. When these probabilities have been explained to the parents they have all given hearty co-operation. Gastrointestinal symptoms may be present, as the following history illustrates:

Patient, age 6½ years. About one and one-half years ago there began recurrent attacks of nausea and vomiting accompanied occasionally with a rise of temperature. There was present in the vomits greenish yellow mucus. The tonsils and adenoids were removed with some benefit. On general examination no reason could be found for the symptoms. There was slight impairment of nasal respiration and the child's mother reported frequent "colds." The child was subnormal physically. Hygienic and dietetic treatment was instituted with some benefit. Nasal examination showed a considerable quantity of the usual mucopurulent secretion on the floor of the nares, with crusting on the anterior tips of the middle turbinates. A diagnosis of low-grade maxillary antrum infection was made and operation performed with the usual after-treatment. There has been a very marked improvement in the patient's general condition. She now sleeps well when formerly she was very restless; the recurrent gastrointestinal symptoms have ceased. She is now gaining in weight rapidly, as compared with a former slow gain, and the antrum infection is clearing up gradually.

The allergic type may be illustrated by the following history: Patient H. I., age 6 years. Since birth nasal respiration has been impaired. At 3½ years of age the child's tonsils and adenoids were removed with very slight improvement. Frequent physical examinations were made and the patient's diet and general condition supervised by the family pediatrician. Three years ago the child developed asthma; the attacks were worse during the winter months and were not influenced favorably by general measures. In November, 1924, nasal examination showed considerable mucopurulent secretion on the floor of the nose. This could be removed by the suction pump in surprisingly large quantity. The child's maxillary antrums were drained surgically and the usual after-treatment instituted. There was a large quantity of secretion present at each irrigation. During January, 1925, the drainage openings in the antrums were re-opened, and this was repeated again in March. Improvement in this patient has been about 90 per cent. The nasal respiration is now fair, the asthmatic attacks have been absent for five months and the child is developing normally. An analysis of the remaining twelve patients shows only slight variations from the results noted above.

In order of occurrence the following symptoms have been present: (1) Impaired nasal respiration. (2) Nasal examination usually shows varying amounts of mucopurulent secretion. (3) There is

usually present general symptomatology of absorption from local infection.

**Treatment**—The treatment which is giving the best results is as follows: (1) Intranasal drainage of the maxillary antrums is performed under a short general anesthetic, usually nitrous oxide. (2) The maxillary antrums are kept as clean as possible by irrigation with normal salt solution. (3) Careful supervision of the patient's general condition is made by the pediatrician.

#### DISCUSSION

E. S. BUDGE, M. D. (Chapman Building, Los Angeles)—The subject of sinusitis in children is of great importance not only to the rhinologist and pediatrician, but more so to those in general practice. Comparatively few cases complaining of the symptoms outlined in his paper come directly to the specialist.

Many symptoms resulting from infection of the facial paranasal sinuses, especially the maxillary in young children are treated as general conditions. These patients come to the specialist only as a last resort when all other treatment has long since failed to restore the child to health.

Many times when a rhinologist is consulted he, too, often does not give enough attention to the sinuses. It is not generally realized that sinus infection is of equal importance to that of tonsils both in its direct and indirect effect; in the production of rheumatic fever, chorea, pyelitis, nephritis, anemia, and malnutrition. While in infants the symptoms may be wholly referable to the gastrointestinal tract, to say nothing of the many cases of fever of unknown origin.

In my opinion sinus involvement in children is much more common than is often suspected. Like all other processes of infection the vast majority heal spontaneously, but many not until a great deal of damage has been done in the way of edema and hypertrophy of the mucous membrane of the nose as a result of irritating discharge causing narrowing or obstruction to the nares, further hindering sinus drainage. After all proper drainage will cure all cases, this being our only object when operation is instituted.

As a pool of mucus in the floor of the nose is suggestive of sinus involvement, we may add to the strength of this finding by clearing the nose thoroughly with suction or swab. Then have the patient hold the head forward for ten minutes; if quantities of mucus reappear it is fairly certain of sinus. Because inflammatory conditions of the infundibulum and mucous membrane do not cause an immediate reappearance, it must come from a place of retention, and, of course, from the anterior series if draining over the lower turbinate. I have found it convenient for observation to shrink the spongy tissue of the turbinate by touching the anterior tips with cotton probe moistened with ephedrin sulphate 5 per cent.

Such local symptoms as cough of a persistent character, bronchial findings, pharyngeal and laryngeal irritations, accompanied by mucus in the nose may mean sinus infection, even in the absence of general symptoms.

A history of typhoid fever, influenza, measles or other infectious diseases is of importance as a causative factor; such history should direct our attention to the sinuses, always remembering that the absence of mucus and crusts does not exclude sinus.

J. A. CONNELL, M. D. (Riverside, California)—If we note carefully the repeated and prolonged colds which children suffer, with a continuous discharge of pus or mucus from the nose, we will find that many of them are due to infections of the sinuses.

It has been found that the antra are the first sinuses to become infected in children, in the majority of cases.

It is seldom there is complete blocking of all of the openings of the sinuses, because the sinus openings are larger proportionately than they are in adults. This is also a good reason for the more persistent discharge from the nose in children.

The only cause for dental infection would be trauma or death of the pulp in the upper first molars, which erupt

at the age of 6 years. Due to the lack of dental attention the pulp may become involved before the age of 12 years, and cause the same type of antral infection that we find in adults.

Local examination is very important for antral disease before opening the antrum, and we must consider the following symptoms: (1) the amount, character and location of the discharge from the nose; (2) the degree of tenderness over the antrum and surrounding parts; (3) transillumination; (4) x-ray; (5) exploratory puncture.

I think it is seldom necessary to open the antra if we would take a set of x-ray plates after appropriate medical treatment has been instituted, then we would probably find that the trouble had cleared up.

Although there has been a tendency of a great many rhinologists to puncture the antra at frequent intervals to wash them out, if we give the proper medical treatment first along the same line as given adults usually it would be unnecessary to open the antrum.

As long as the normal osteum is open sufficient drainage takes place, but there is always a risk that a permanent plug will form which will necessitate opening the antra.

The puncture has this advantage: If any discharge is found in the antrum it can be washed out through the needle, unless the infectious material is so thick it will not go through. It may be a serum, seropus or pus.

Most of the cases referred to the rhinologist for diagnosis are of the chronic form, and therefore should be opened and washed out, especially if the tonsils and adenoids have been removed with only slight improvement.

A continued irritation of the membranes in the antral cavities may cause granulations to form, causing the patient to have a reoccurrence of the acute infection.

Children are not so apt to have a reoccurrence of antrum infection as adults, due to the large openings of the antrum into the nose.

REXFORD HOOBLER, M. D. (Medical Building, Oakland, California)—Up to the last few years it has been the general opinion that the maxillary sinuses in children are not sufficiently developed prior to puberty to give rise to infections. This opinion, however, is erroneous, as the maxillary sinuses are well developed at the beginning of the second dentition and a considerable cavity with outlets exists as soon as the child has obtained its temporary teeth. From this time on a child is subject to maxillary sinusitis.

The first time I realized that this condition could occur in young children the infection was caused by a dentist breaking through a carious tooth into the antrum. Since then I have hesitated to use nasal irrigation in acute nasal infections for fear of carrying the infection into the antrum. Many physicians prescribe snuffing of saline solution from a cup or palm of the hand for colds which seems to me also a dangerous procedure. I should like to hear from Doctor Shook what technique or conditions he feels is conducive to the development of sinusitis in children.

Following antrum puncture I have found children to be nervous, irritable, and anemic. They have no appetite and frequently complain of headache and nausea. Tonics such as iron, arsenic, and nux vomica are valuable. It frequently is necessary to give five small meals a day instead of three large ones. Hygiene of the oral and pharyngeal cavities is important. It is very often advisable to keep the child in bed even though he has no increased temperature. With nutritional improvement and good drainage the infection usually disappears in a few weeks.

The type of infection is not common in children, and Doctor Shook's experience with such a large group should enable those of us working with children to diagnose this condition more intelligently in the future.

CLIFFORD SWEET, M. D. (242 Moss Avenue, Oakland, California)—Maxillary antrum infections are very common in children of all ages. They occur as a part of every acute upper respiratory infection of more than very mild grade and short duration. The profuse mucopurulent secretion caused by the common cold arises from the antrums; no other portion of the nasal structures can produce it. If the infection is not prolonged because of its own virulence or because of the poor resistance of



the child complete healing takes place after a short time with no structural change within the antrums. However, if a very virulent infectious process gains entrance to the antrums, or if reinfection occur at frequent intervals, permanent damage is done; a pathological condition is begun and a chronic sinusitis results. This in turn is too often followed by impaired general health, atrophic rhinitis, infection of the other paranasal sinuses, as they develop and any or all of the disease processes which are caused by chronic focal infection. Good health, therefore, is the primary prophylactic measure. An excellent state of nutrition, which is possible only with ample food, sufficient vitamins and exposure naked in the direct rays of the sun, means fewer respiratory infections and these of shorter duration.

The infection, when it has become subacute or even when chronic, may often be cleared up by improving the child's general condition. When doubt exists as to the necessity of surgical interference the general measures, rest, a carefully arranged diet with cod liver oil, heliotherapy or the quartz lamp, and in selected cases an autogenous respiratory vaccine should be given fair trial. In deciding whether or not surgery should be advised, the appearance of the anterior portion of the middle turbinate seems to be the best guide. If the mucous membrane of this area shows a beginning atrophic rhinitis, surgery is indicated. After atrophic rhinitis has made its appearance I have not seen a spontaneous recovery.

Shook is calling our attention to a most important and heretofore neglected seat of infection in children. I have referred him many cases with gratifying results. This work promises an opportunity to prevent many children from struggling through years of impaired health—to arrive at adult life with chronic sinus infections, the treatment of which is at present far from satisfactory.

## COSMETIC SURGERY OF THE THYROID GLAND UNDER LOCAL ANESTHESIA †

By CHARLES CALVIN TIFFIN \*

UNLIKE most other regions of the body, the scar following thyroid surgery must be placed on trial before the critical observation of the patient, the patient's friends, and others. As surgeons we have probably not shown the proper interest in the cosmetic effects of our work but rather in the therapeutic results of the operation, in consequence of which a great number of women in particular have refused operation, preferring to carry the goiter through life rather than have what they call "a large ugly scar." This idea has been helped along to a large extent by friends, so-called, who have failed to realize the great service to be rendered the patient in terms of better health and extended life.

It is unnecessary to say that the scar should be no objection to whatever is necessary to save life, for we are supposed to be scientific men with one great object in view—the restoration of good health and life conservation. With this idea in mind we have gone on through several generations of thyroid surgery, making the same large scar as our great

forebears in this interesting field. Of course, we are not to be severely criticized, for in all scientific research the refinements and niceties always have followed the somewhat cruder earlier work.

Public opinion largely accepts the fact that goiter operations in the hands of skilled operators offer little hazard to the life of the individual, especially if the patient is cared for early. Let us demonstrate, then, that not only can we do a thyroidectomy safely, but that we can do it so as to make the scar almost invisible. In order to succeed in this we must remember, first, that all scars are produced by the direct injury of the operation or to violence or roughness in handling the tissues, and, second, to our tendency to overlook the great principle that all tissues must be placed in such a position during and in closing the operation that a normal-looking neck will be the result. It is not enough simply to close the wound superficially so that it appears smooth and nice in appearance.

Important questions for the surgeon to ask himself are:

How will this neck look in six months or a year?

Have I carefully studied the contour of the neck to be operated on, considering its present deformity; just how much gland is to come out, and just where and how long the incision is to be; and have I a very sharp knife with which to make the incision?

Am I going to remember that this is done under a local anesthetic, and that my patient, while not suffering pain, will not enjoy the least bit of roughness in sponging or in handling the tissues, and am I really aware of the fact that the principal cause of shock is lack of gentleness during the operation?

Have I carefully dissected the skin of the lower flap as well as the upper, knowing that if the upper flap is freed and the lower not freed the result will be an overhanging scar?

Have I been careless under the surface; have I neatly and carefully resected the thyroid gland, or have I left irregular masses here and there?

Have I cut muscles that should not have been cut or have I interfered with the nerve supply of the sternomastoid muscles which will be certain to cause atrophy?

Have I cleared the trachea of all thyroid tissue so that there will be no regrowth of the gland in the midline with its resultant deformity?

Have I made a nice straight-line incision in the fascia so that a neat smooth scar will follow here, or have I bruised the fascial edges, making likely a slough with deformity in midline?

Have I ligated the superior poles of the thyroid gland high enough to prevent regrowth in this locality, and in ligating the superior pole have I been careful not to carry the suture into the subcuticular tissue, thus producing an ugly-looking depression in this region?

Have I a perfectly dry clean field after the operation is finished, or am I leaving in bits of tissue, clots or small bleeders as an inspiration to deformity and adhesions, and have I carefully closed and sutured all of the small cut muscles?

Have I placed my twenty-four-hour drain through the angles of my incision by means of a puncture wound through the sternocleidomastoid muscle, or

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have I put it in midline with a certainty of midline skin attachment and puckering later on?

Have I sutured the skin too much or do I realize that perfect apposition and rest is what I want rather than pressure and constriction from too much suturing, especially in the loose skin of the neck?

Am I thoroughly appreciative of the fact that the drain should be removed at the earliest possible moment, varying from twelve to twenty-four hours, and that part of the skin clips can be taken out the second day and the remainder the third morning?

Lastly, am I appreciative of the fact that active and passive massage should be begun early and kept up for several weeks to prevent slight adhesions with their deformities?

I believe that local anesthesia is the ideal anesthesia in thyroid surgery because it helps to answer these questions satisfactorily to myself and patients. In injecting a local anesthetic, start, of course, with a very small needle, telling the patient to expect a small pin-prick sensation. I think it is best to make the first injection one inch below the sternal notch, working upward from this point. It is not necessary to enter through this same point, but it is necessary always to enter through an anesthetized area. Infiltrate in the subcuticular tissue and not into the skin, and after this is well infiltrated inject deeply on a level with the superior poles of the gland, forcing in about 10 cc. Be sure to stay outside of the trachea and medially to the large vessels, and be sure to draw on the piston of the syringe before you inject, to be sure you are not in the blood vessel.

Make your incision much smaller than you think you need. Two to two and one-half inches is long enough for all but the occasional large goiter, and even the large cystic goiter can be removed through very small openings in the skin, for it is very elastic. After making the skin incision at least one inch out under at the ends and well under the lower and upper flaps, then with a special tenaculum or small forceps fasten the upper flap out of the way by means of attachment to the sterile side of the face protector of the patient.

In working through small openings such as this, a double spreading retractor is no help and really only a handicap, as it makes the edges of the skin tight and prevents the freeing of the superior poles. After the fascia has been incised and the gland is in view, pass No. 2 catgut tractor on a needle through the more conspicuous lobe, and then with this tractor bring this lobe up into the wound. Now inject about 5 cc. of one-half per cent novocaine into the lobe, especially the superior pole. Be certain you are through the anterior fascia and small muscles of the lobe, and as you free it insert more tractor sutures and the lobe will be elevated from its bed. While doing this catch and tie the lateral venous circulation. When the superior pole is in position and free, clamp off with two forceps for double protection and with a sharp knife free the superior pole.

From now on your work is easy. If the patient feels pain at any time inject novocaine at the point of pain. Remember the sternomastoid muscles are sensitive, so inject them too if the patient complains

as your assistant starts gently retracting on the side you are working on. Do your resecting from the medial side as much as possible, first freeing the trachea by incising down to it in midline. This resecting from the medial side on a level with the trachea insures protection of the recurrent laryngeal. But as you approach this delicate region place your forceps and test out the patient's voice before you resect in a given area and you will not be sorry later. After the lobe is out tie off bleeders very carefully. Here you appreciate the two forceps on the superior pole, for if the suture breaks in tying you still have one forcep in place. After removing one lobe and securing perfect hemostasis remove the other in like manner. Have the patient cough several times after the resection is over. If there are poorly secured ties or temporarily placed clots this will dislodge them and you can further ligate and feel certain you will have no postoperative hemorrhage. Remember to use novocaine whenever you need it to secure perfect freedom from pain, and advise the patient to inform you at the slightest pain. Make a puncture wound for a small flexible tube through the sternomastoid muscle and close the fascia with interrupted plain gut. I do not use subcuticular sutures for the skin, simply closing with clips. Remove the drain in from twelve to twenty-four hours, part of the clips the second morning and the rest the third morning. Massage early and free the skin from any possible adhesions, having the patient assist at this and keep it up until the skin is freely movable and normal in appearance.

I have long ago ceased to use adrenalin with the one-half per cent novocaine. Consequently I no longer encounter giddiness and faintness. I also find that my anesthetic continues to be as satisfactory as it was when I used adrenalin. I do use morphin preparatory to all thyroid surgery by giving one-eighth of a grain one and one-fourth hours and an additional one-quarter grain thirty minutes before the operation. The first hypodermic quiets the patient and takes away her sensitiveness, and the last takes care of the ordinary discomforts of a hot operating room and enforced quiet of one position on the table.

Goiter patients are often very ill and their comfort is constantly catered to. The nurse sitting at the head of the table can slip her hand under the patient's neck and back of the head, ice can be given and the patient's mind is occupied by quiet questions from time to time, first, to help time to pass and, second, to show pressure on the recurrent laryngeal.

Remember that the cardiovascular system and the viscera are great sufferers from prolonged toxic or exophthalmic goiter and that our problem is to find a means of removing this goiter with a minimum of irritation and shock. We must interfere as little as possible with the diet, avoid hemorrhage and lighten the load on the circulation and kidneys.

The experienced surgeon readily appreciates that there is a distinct difference between goiter and other major surgery. There is no other type of operation which gives the severe reactions that often occur after thyroidectomy.

Call to memory some of your goiter patients. If

you have been unfortunate in one of these the third or fourth day after an operation, think this point over, "why did you lose the patient and why usually before the fourth day?" Is it because the patient is so much undernourished and run down that any additional load often results in infection which kills her? Plummer says that infection kills most of these patients. It is my experience and belief that the symptoms during the reaction clearly prove that infection has much to do with the high mortality in this type of surgery. Certainly there is no type that can cause the surgeon more worry for two or three days after the operation than thyroidectomy.

What are some of the advantages of local anesthesia? It enables one to feed the patient right up to the time of operation and to have practically no interruption following it. It gives the operator co-operation from the patient during the operation, making it possible for her to warn the operator when the recurrent laryngeal nerve is in danger or has been pinched. Many times I have been very close to this nerve, and have discovered my proximity to it by the disturbed breathing or changed voice of the patient. Again, a patient who is awake can co-operate with the surgeon by coughing, following the removal of the gland. This will dislodge a clot or poorly secured tie, and it will do this while the field is under the observation of the surgeon. Again, when one becomes thoroughly conversant with local anesthesia he has a tendency toward developing rapid technique because of the continual desire to get the patient off of the table as quickly as possible, a matter of great importance in this type of surgery. Shock, which is one of the important things not to be overlooked, is severe in direct proportion to the amount of trauma and anesthetic. We are extra careful to avoid shock when the patient is awake. It is true our mortality today, especially from exophthalmic goiter, has been much lowered through preparatory use of iodine, and we are losing very few patients. Certainly it should be our endeavor to lower our mortality still more.

#### CONCLUSIONS

1. Local anesthesia favors increased speed and efficiency of the operator and enforces gentleness in operations on the thyroid.
2. Small faint scars may be secured by: (a) short clean-cut incision; (b) free dissection of both the upper and lower flaps and laterally from the angles of the incision; (c) clean dissection and careful ligations; (d) small drain at angle instead of midline drain; (e) early removal of drain and skin clips; and (f) early and continued massage to keep skin from adhering in any place.

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The essence of good manners, generosity of spirit, a sense of style and a sense of proportion, these are the essence of all art. They are the essence of the art of life. It is a tragic comment on our scurrying industrial society—and on the intellectual life it generates—that that most gracious of all arts is coming into disrepute.—Irwin Edman, *The Bookman*, August, 1926.

#### ADVANTAGES OF MEDICAL SOCIAL SERVICE IN ORTHOPEDIC SURGERY †

By GEORGE J. MCCHESENEY \*

**M**EDICAL Social Service is indispensable in the special field of orthopedic surgery. This is because orthopedic surgery is the surgery of chronic long-drawn-out diseases such as infantile paralysis, tuberculosis of bones and joints, spastic paraplegia, chronic arthritis and congenital deformities such as club-feet, dislocated hips, and cleft palate, in which services are required over a period of years, during which the medical social worker must maintain a proper contact between the surgeon and the patient. Essential contact consists not only in routine follow-up letters sent when the patient is overdue for the next visit, but in a periodic check-up of the changing financial status and social and housing conditions of the family. A child properly cared for at the beginning of a long course of treatment for tubercular hip or spine may later suffer from improper food and lodging when the father is out of work, or the family becomes larger as years pass by. Here is where steady visits and interviews by the social worker, with parents or patient, becomes so necessary, and is more often acceptable and, of course, more economical than too much attention by the doctor. A very helpful worker in these circumstances is the specially trained visiting nurse who can do simple dressings, inspect braces, shoes, plaster casts, recognize the kind of co-operation that is provided at home, the need of convalescent care in the country, etc., and report findings, actions, and changes of status to the physician.

An even more important service of the medical social worker is the assistance she can give in maintaining the morale of the patient and family. The encouraging ultimate prognosis that the orthopedist usually can give patients needs constant reiteration and amplification as time wears, and feasible results are slow in materializing. The surgeon, I fear, is apt to be impatient, often hurried, in his explanation for the general tediousness of things, and here the medical social worker can supplement her advice with additional details, information, and encouragement.

An important duty of social workers is the searching out and arranging for the treatment of hitherto unrecognized, missed or neglected patients requiring orthopedic care. Such patients are getting fewer with the many charitable agencies ferreting them out, but new ones are constantly being found and the search must continue as long as we have the ignorant, the poor, and tenement housing.

Another field of useful endeavor, the exact opposite of the foregoing, and in which the possibilities are but beginning to be recognized, is the social care and supervision after the period of active medical and hospital treatment is finished. These children,

† Read before the 1926 Annual Meeting of the California Association of Medical Social Workers.

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often handicapped by years of disease, are behind their fellows in school and need assistance and encouragement, through the years up to maturity and a wage-earning status.

Lowman, in his Orthopedic Hospital School in Los Angeles, has recognized this need of bridging the gap between the periods of convalescence and wage earning by the formation of alumni clubs of former patients who have reunions once or twice a year, when they visit the hospital, have entertainments, etc. This gives them a chance to see and encourage patients undergoing treatment similar to their own, and also provides opportunity for the medical social worker to ascertain how the former patients are progressing and to aid them in getting jobs, keeping them off the streets, and to arrange for further treatment if necessary. In other words, this is a continuance of social care and supervision for years longer than formerly attempted, done under the guise of alumni associations, similar to the collegiate ones. The individual does not suspect the real purpose, which is to continue contact, with moral and material support after the medical is of secondary importance, and to continue until the person is a reasonable wage-earner, able to begin repaying his debt to the public which has hitherto provided for him. The economic value of this prolonged supervision is evident, for it bridges the long gap, usually several years between the end of medical treatment and the beginning of wage earning, and unless this is well and properly done the patient loses much, and the state is not reimbursed to the extent to which it is entitled. Many times possible pauperism and its heavy load upon the state may be prevented by this far-reaching after care.

This is but an outline of the many diverse duties of the medical social worker, duties requiring in the highest degree the qualities of common sense, tact, patience, and vision, by a group of health workers, often overworked, always underpaid. But in the larger and finer sense let them keep in mind George Francis Adams' lines: "He climbs highest who lifts another up."

Psychology is not yet a full-fledged science, but it has made important and far-reaching advances in the past few years. The behaviorists, the psychoanalysts, and the industrial psychologists are laying the basis for profound changes in the technic of group control. Where is this new knowledge being principally utilized at the present time? In the offices of advertising agencies. Today as never before the man with something to sell knows how to turn into cash three fundamental aspects of human nature: the desire to attract the opposite sex, the desire to exert power over one's neighbors, the desire to get safely and honorably to heaven. In brief, the higher salesmanship has captured applied psychology, horse, foot, and guns. And the very knowledge which might render us significant help is turned against us to create new wants, new desires, new forms of waste. (Some psychologist should write, as he starves, a monograph entitled: How to Build up Sales Resistance. No one will read it now, but in a hundred years he will have a statue in the market-place.)—Stuart Chase, Harper's, September.

## HOW MEN DIE IN PRISON

By LEO L. STANLEY\*

(From the California State Prison, San Quentin)

THERE always is much public curiosity about prisons and prisoners. The prison is the home of tragedy. Tragedy marks the crime, frequently attends the criminal throughout his life, and it is a tragic ending when he finds the iron doors locked behind him. Many tragedies, often fatal ones, are enacted within the prison walls.

How do men die in prison? This is a question which is worthy of a critical analysis. In the California State Prison at San Quentin, data for the past twenty-three years is available. The accompanying table, No. 1, shows the cause of death and the date, together with the prison population for each of these years. Chart I shows the prison population

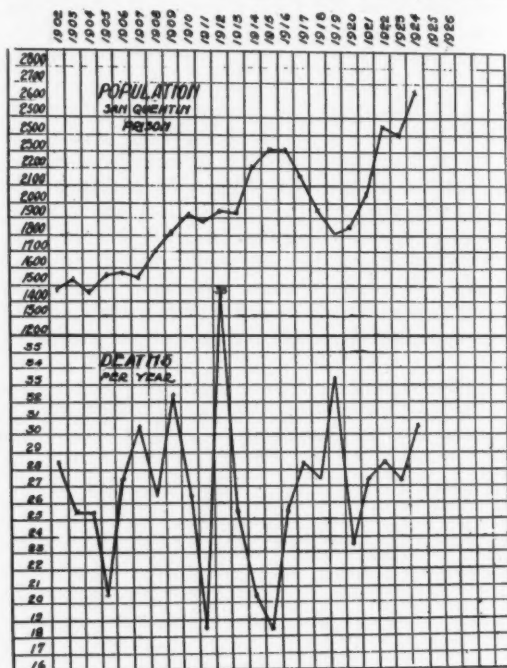


CHART I

by graph; Chart II shows the death rate per thousand from all causes, as well as the rate of death from tuberculosis and executions; Chart III shows the deaths per year by suicide; and Chart IV shows the number of deaths each year from tuberculosis and executions.

From Chart I it is seen that there has been a gradual increase of population in San Quentin from 1450 in 1902 to over 2600 in 1924. In 1916 the population began to decrease from 2230 until it reached 1800 in 1919. This was due to the fact that large numbers of young men were in the army. At

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the end of the war it increased, and has climbed rather briskly since. Chart II shows that although the prison population has increased, the death rate has decreased. This is accounted for by the fact that better sanitary and hospital facilities have been provided and methods of treating disease improved.

Every man who enters this prison is vaccinated

against typhoid fever, which in consequence has been almost completely eliminated as a cause of death.

Better facilities for the housing of the tuberculous have been provided with the result that the death

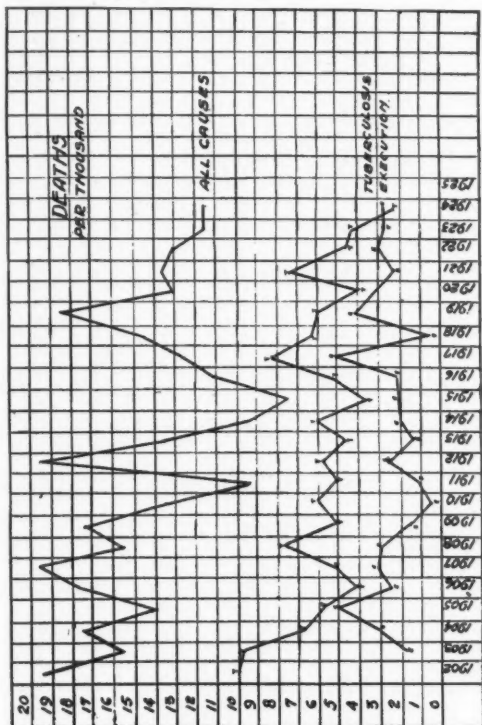


CHART II

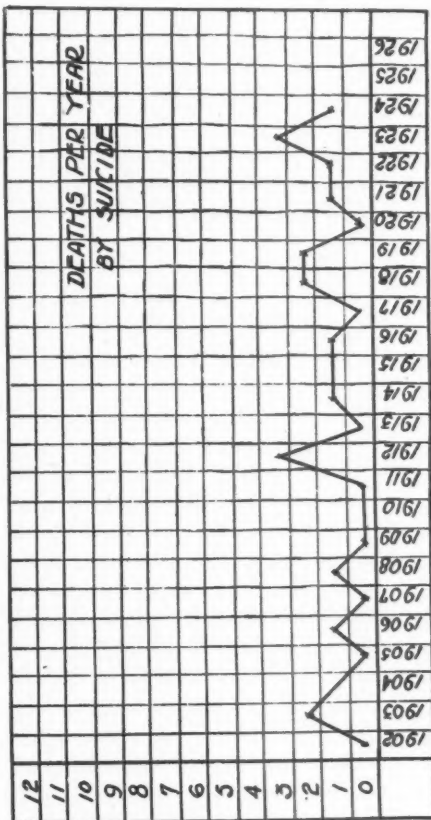


CHART III

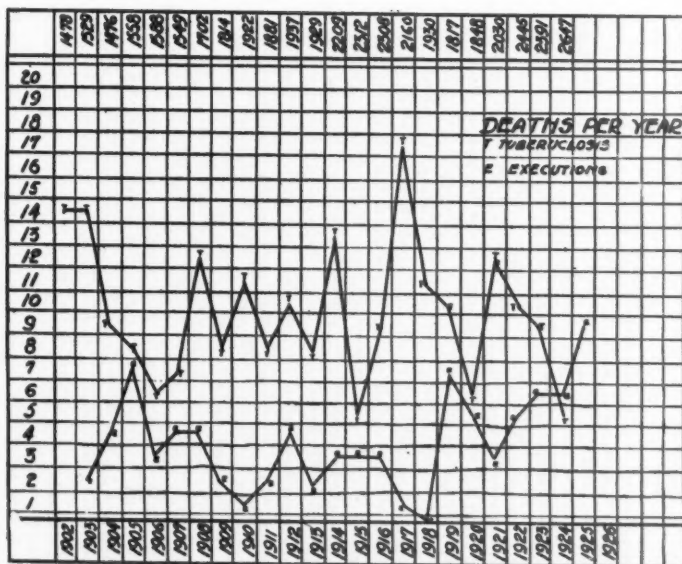


CHART IV

Year	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Population	1478	1529	1476	1558	1588	1549	1702	1814	1922	1881	1937	1929	2209	2312	2308	2160	1930	1817	1848	2031	2445	2591	2647
Aneurism					1	1																	
Aortic insufficiency																							
Arthritis deformans																							
Apoplexy											1	1									1		
Acute uremia																							
Acute indigestion																							
Acute rheumatism																							
Anemic dysentery													1										
Arsenical degeneration liver																							
Acute pancreatitis																							
Agina pectoris																							
Bright's Disease			1																				
Brain abscess											1												
Broncho-pneumonia																							
Bronchiectasis																							
Carcinoma-bladder				1																			
Carcinoma-ovary											1												
Carcinoma-rectum																							
Carcinoma-uterus																							
Carcinoma-stomach																							
Carcinoma-prostate																							
Carcinoma-brain																							
Carcinoma-rectum																							
Carcinoma-kidney																							
Carcinoma-parotid gland																							
Cerebral meningitis						1	2																
Cerebral hemorrhage				1							1												
Cerebral concussion																							
Cerebral tumor																							
Cerebral softening																							
Cerebral abscess																							
Cerebrospinal meningitis																							
Cardiac dilatation																							
Cardiac failure																							
Chronic nephritis																							
Cirrhosis liver																							
Chronic myocarditis																							
Chronic cystitis																							
Cardiac thrombosis																							
Cholecystitis																							
Coccidioides granuloma																							
Diabetes											1												
Dilatation of heart																							
Duodenal ulcer																							
Dynamite explosion																							
Execution, legal			2	4	7	3	4	2	1	2	4	3	3	3	3	1							
Electrocution, accidental											1												
Empyema			1	1																			
Endocarditis																							
Erysipelas																							
Found dead in cell				1	1																		
Fracture of skull (murder)																							
Fracture of skull											1												
Fracture of thigh																							
Fracture of femur															1								
Fatty heart																							
General debility																							
Gumma of brain																							
Gastric ulcer			1																				
Gout																							



[illegible]

rate from this disease has been cut from ten per thousand in 1902 to two per thousand in 1924. The rate was greatly increased in 1916 and 1917 because all the tuberculous prisoners from the state prison at Folsom were transferred to San Quentin for treatment. Many of these men were in bad condition and died soon after the transfer.

Each prisoner on entering San Quentin is given a thorough physical examination, and at this time cases of tuberculosis are discovered and the patient immediately hospitalized before he can spread the infection. Next after tuberculosis as a cause of death come legal executions. In 1902 executions by hanging were concentrated in San Quentin instead of being done by the sheriffs in the various counties. The largest number occurring in any year has been seven, while in the year 1918 there was none.

The largest number of suicides in any year was three. The most common method of suicide was by jumping from a height, although suicide by hanging, drowning, and cutting of the throat are recorded. One man saturated his clothing with kerosene and set fire to himself.

The great influenza epidemic of 1918 carried off only three. Very strict hospitalization orders were enforced, and all prisoners upon the first symptoms were immediately sent to bed.

The murders committed in prison amount to slightly less than two each year. Their causes are many. Jealousy, race hatred, escapes, and fits of passion, frequently causes, slightly intensified by surroundings, which might prompt the same act on the outside. It seems, however, that there is more of tragedy in the deaths which occur inside the walls than those outside.

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**Glycosuria**, in itself, can no longer be regarded as a sign of a single disease. It appears more rational to think of glycosuria as a symptom such as jaundice, angina, or headache, the cause of which must be ascertained in each case. The diagnosis of renal glycosuria should not be arrived at hastily, since unquestionable instances of this condition are uncommon and few cases have been followed for a sufficient period to be certain of the final outcome. An elevation of the renal threshold, so that hyperglycemia exists without glycosuria, occurs occasionally in diabetics who have been treated with insulin. Present information would indicate that a constant elevation of the threshold is a disadvantage to the organism because of the excessive work continuously thrown upon the internal secretion of the pancreas. The four important groups of nondiabetic glycosurias associated with an elevated blood sugar content are the alimentary, neurogenic, toxic, and the endocrine. The endocrine group at the present time represents a large and poorly understood one which is associated with a disturbance in the function of the glands of internal secretion. Perhaps the most outstanding example is the diminished carbohydrate tolerance of hyperthyroidism as shown by the presence of glycosuria and an abnormal blood sugar curve. The glycosurias accompanying pituitary and adrenal disturbances need further experimental study. True pancreatic diabetes offers especial difficulty in the diagnosis primarily in the three following groups of cases: (1) asymptomatic glycosuria; (2) patients complaining of the complications of diabetes only; (3) patients first seen in coma.—J. Lab. and Clin. Med.

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An investigation committee in England has found that only 15 to 20 per cent of drug addicts treated achieve a lasting cure.

## THE TECHNIQUE OF ADMINISTRATION OF SODIUM TETRAIODOPHENOLPHTHALEIN IN CHOLECYSTOGRAPHY

By GARNETT CHENEY \*

(From the Department of Medicine, Stanford Medical School)

**DURING** the last two years many comprehensive articles have been written on the use of tetraiodophenolphthalein for gall bladder visualization. Its value has been proved beyond question, and cholecystography now ranks as one of the most important recent advances in diagnostic procedures. The technique of the dye administration has varied considerably, and the outlining of a routine method that has proven satisfactory should contribute to a more rapid increase in general usage of this test.

In Stanford medical department we have used sodium tetraiodophenolphthalein exclusively for the last eight months, and have given it to private as well as to clinic patients. Two methods of administration have been utilized: giving the dye in pill form by mouth, and in solution by intravenous injection. The pills have been given to the outpatients, while those receiving it by vein have been required to enter the hospital. Two hundred and seventy-three patients have taken the pills, 122 the injection.

In the oral method stearin-coated five-grain pills are given, each patient taking one pill per ten pounds of body weight. After a light dinner and at about 6 p. m. all the pills are swallowed, the patient being instructed to take plenty of water with them, to lie down and to take nothing more by mouth. Outpatients having a complete gastrointestinal x-ray series routinely take tetraiodophenolphthalein pills the evening of the first day of the examination. The first gall bladder visualization plate is taken at the time of the twenty-four-hour gastrointestinal examination, on the morning of the second day. A certain number of patients vomit the pills, which makes further procedure with the test impracticable. In accordance with other observers (1), (2), (3), (4), I have found cholecystography by means of the pills unreliable, except for the visualization of the normal gall bladder.

The sodium salt of tetraiodophenolphthalein as prepared by the Eastman Kodak Company of Rochester, New York, is used for intravenous injection. This is a light blue crystalline compound with a molecular weight of 682 grams, which is 61 per cent iodine by weight. It deteriorates on exposure to the light. A solution is prepared by dissolving three grams of the dye in 50 cc. of distilled water, and autoclaving for twenty minutes. Sterilization may

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also be accomplished by placing the flask in a boiling-water bath for twenty minutes.

There are two methods of giving intravenous tetraiodophenolphthalein: one by syringe, the other by gravity. The former has not been used in this series, as previous experience makes me feel there is more likelihood of local reaction. The latter has proved satisfactory. The apparatus used is sterilized. A salvarsan cylinder with long rubber connection at the bottom is set up on a stand. A two-way Kaufman-Luer syringe with intravenous needle is attached to the tubing. Normal saline at body temperature is allowed to flow through the tube until all air is expelled. The solution of dye is filtered through medium filter paper into a sterile bottle, heated to body temperature and added to about 10 cc. of normal saline already in the cylinder. The use of the two-way Luer facilitates the injection in that a direct flow is established as soon as the needle is inserted. Special care is exercised in making sure the needle is well in the vein. Five to ten minutes are allowed for the injection, and the dye is washed out of the apparatus with about 25 cc. of normal saline at body temperature.

In 122 patients receiving intravenous injections of tetraiodophenolphthalein there were but four general reactions.\* Only one of these was of a serious nature. Twenty minutes after receiving the dye the patient had a chill with rapid weak pulse, pallor and fall in blood pressure, but responded rapidly to adrenalin subcutaneously. One other patient had a mild chill ten minutes afterward. It is worthy of note that both these patients had their reactions very soon after injection. Two patients suffered nausea and vomiting two to three hours after administration of the dye, but as both had had nausea and vomiting previously these symptoms may not have been due to the dye. Only two local reactions have occurred with the gravity method. These consisted of local discoloration with slightly painful thrombosis, but no induration or sloughing. Hot compresses relieved the pain.

The intravenous dye may be given on the first day of the gastrointestinal x-ray series, or independently. At first the injections were given about 10 p. m., nothing being allowed after supper until noon of the next day, the routine orders for the oral and intravenous methods being the same. X-ray plates were taken at 8 and at 11 a. m. on the second day, and a third following a full lunch. It has been found simpler to inject the dye at 5 p. m., the patient going without supper but receiving fluids up until midnight. On the next day the first x-ray plate is taken about 8 a. m. on a fasting stomach, a breakfast rich in fats is given and a second x-ray taken at 11 a. m. The series of two plates, one at fifteen hours, the other at eighteen hours after injection, has been found sufficient to picture the ability of the gall bladder to concentrate and to empty following a meal. X-ray exposures are made, using a Buckey diaphragm in order to get the most constant intensity of shadow, and the degree of dye concentration is interpreted by the method of Newell, (5). Flat plates of the gall bladder region are taken routinely preceding cholecystography. Close co-operation with the

x-ray department has been most valuable in accurate interpretation of the findings.

Twenty patients receiving dye intravenously subsequently came to operation, and in only two, or 10 per cent, was diagnosis by cholecystography in error. One diseased gall bladder was visualized, and one normal gall bladder was not.

#### CONCLUSIONS

1. The present technique of oral administration of tetraiodophenolphthalein is unsatisfactory.

2. The intravenous injection of tetraiodophenolphthalein as outlined has proven simple and efficient, and general reactions occurred in only 3 per cent of 122 cases.

3. Cholecystography by the intravenous method should be used as a diagnostic procedure in cases suspected of having gall bladder disease.

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\* Since the writing of this article several severe reactions occurred following the intravenous use of a supply of dye which had not been kept free from exposure to light. The exact cause of these reactions has not yet been worked out. A new supply of dye is giving satisfactory results.

The medical profession of France confronts at present two attitudes: (1) that of the Union des syndicats médicaux, a quasi-official organization, accustomed to treat with the public authorities and which has indicated a willingness to discuss the question of fees with the Caisses d'assurances and to submit a minimum schedule, and (2) that of a certain number of *syndicats* which refuse to enter into any discussion with the *caisses* and which declare that to do so would be tantamount to allowing themselves to be reduced to a wretched condition of slavery, an example of which is furnished by many of the physicians of Alsace-Lorraine, where this form of social insurance has been in force for the last twenty years or more. In Alsace-Lorraine these, *syndicats* assert, the *caisses* have reduced a good part of the physicians to mere wage-earners, poorly paid and overworked. Even hospitals in many instances belong to or are under the control of the *caisses*, which furnish care of all sorts to their clientele without reference to the physicians. The medical profession of Alsace-Lorraine is thus divided into two groups, one harshly or even rudely treated by the *caisses* and merely able to exist, and another group which is independent of the *caisses* but which is compelled to renounce entirely all claims to patients among the working classes, which, in certain regions, constitute the chief source of income.—J. A. M. A., August 14, 1926.

But a little difficulty presents itself. The emergence of science has delegated to a twilight zone the gods and myths invoked by the old-time medicine men. Science is on the throne. Softly; what does the commonalty know about science? Only enough not to blow out the gas, and to read scientific supplements in the Sunday newspapers. Good. Science, for the mass of men, is only a new mysticism; a shift from elves in glades to elves in molecules and air waves and germ plasmas.—Stuart Chase, Harper's, September.



## AN ANALYSIS OF HEART SOUNDS AND MURMURS BY GRAPHIC MEANS †

By J. J. SAMPSON AND R. L. MCCALLA \*

VISUAL records of heart sounds and murmurs have been in use for many years. Their value in certain "fields" has been previously indicated, namely, (1) the accurate study of the time relations of certain audible events to each other and to other recorded indices of the cardiac cycle, thus enabling a better understanding of the factors causing these sounds; (2) the production of permanent records for further study, or comparison, in the instance of cases presenting changing clinical characteristics; and (3) the recognition of certain diagnostic criteria of abnormalities in visual sound records that are inaudible, because of such factors as a rapid rate.

A review of the instruments previously used for this purpose is too extensive for the scope of this paper. It suffices to state that both direct and indirect mechanical methods of transmitting the sound vibrations to a re-

cording mechanism have been employed, also certain optical methods, notably those of Hess,<sup>1</sup> the method employed by Einthoven,<sup>2</sup> using the Einthoven string galvanometer to record currents induced in a simple transformer by a microphone, and the more recent method of Einthoven and Hoogerwerf.<sup>3</sup> Excellent reviews of the subject are given by Weiss<sup>4</sup> and Barker,<sup>5</sup> and by Lewis,<sup>6 7</sup> in both of his articles on heart sounds and in his textbook, Mechanism and

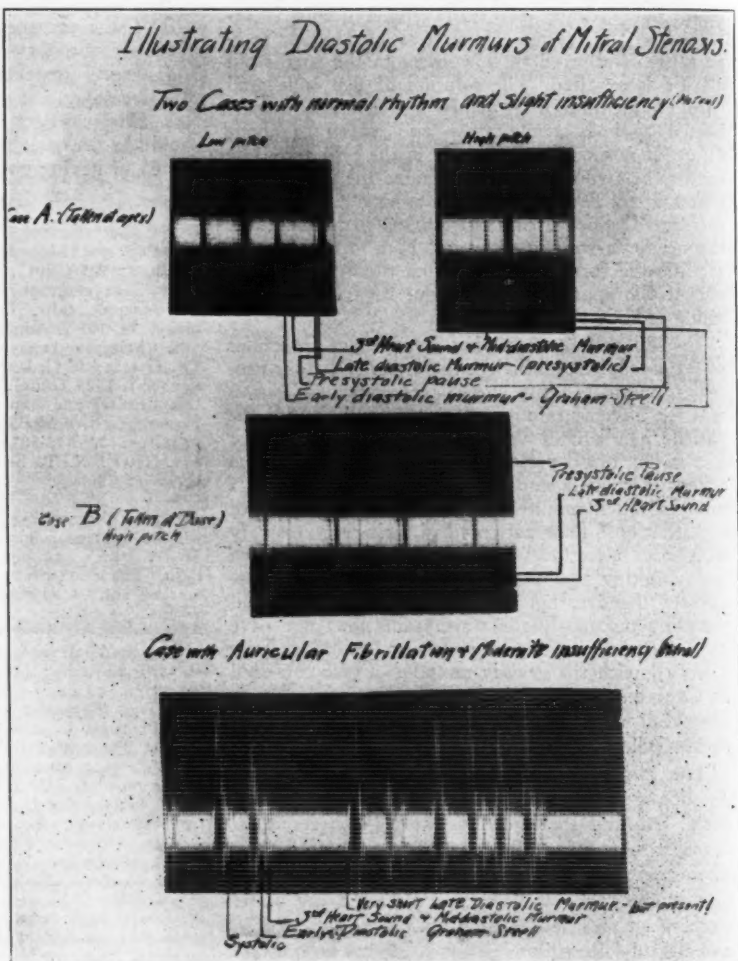


Fig. 1—Phonocardiographic records of three cases of mitral stenosis illustrating the characteristic findings both with normal rhythm and with auricular fibrillation. Camera running at constant speed.

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Graphic Registration of the Heart Beat.<sup>8</sup> The records apparently showing the best definition of sound vibration with least amount of aberration are those produced by the method of Einthoven. Using his technique, Einthoven (himself),<sup>9</sup> Eyster,<sup>10</sup> and also Kahn,<sup>11</sup> Lewis,<sup>6 7</sup> Bull,<sup>12</sup> and Fahr,<sup>13</sup> have contributed many accurate studies of the time of onset, duration, and crescendo or decrescendo character of the normal and pathological sounds and murmurs, and described variations with rate, respiration, posture, and exercise. Certain of the detailed studies are mentioned below.

The limitation of this and other previous methods for fine analyses, is adequately stated by Lewis in that, in general, nothing beyond clearly audible sounds are reproduced, and low-pitched murmurs which the ear may differentiate cannot ordinarily be recorded. This he stated in apparent contradiction of the fact that he observed at various times recorded frequencies of 125-660 per second.

Perfect phonocardiograms by the above method are difficult to obtain because the friction of the recording bell sets up extraneous vibrations.

Our work reveals two more possibilities for clinical use as well as for scientific interest of sound records: (1) recording sounds too faint or blurred

hand-movement vibrations; the amplification of the received vibrations by the recently perfected electron tube methods, using three tubes of the 201-2 D type; and the use of varying condenser and coils with inductances and capacities which allow the filtering out of different bands of frequencies. The amplified and possibly filtered vibrations are then received on the Einthoven string galvanometer and recorded photographically.

The instrument employed by us, was a Western Electric model perfected from the earlier models used by Gamble and Replogle,<sup>14</sup> Gamble,<sup>15</sup> Cabot and Dodge.<sup>16</sup> It was equipped with Low Pass filters of 130, 400, 650, and 1100 vibrations per second.

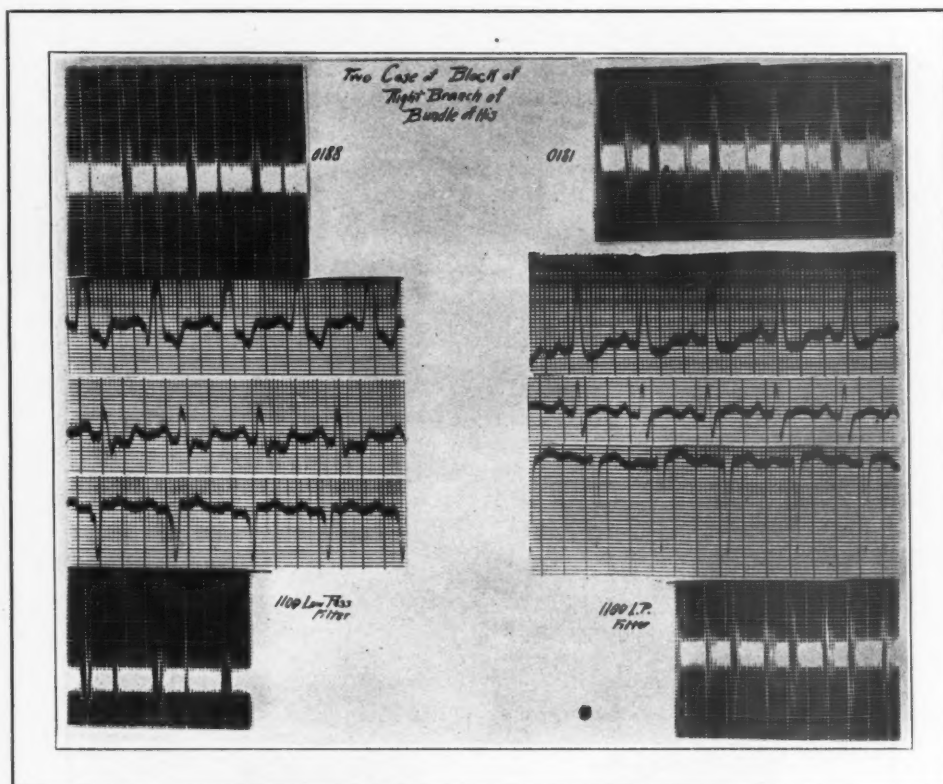


Fig. 2—Phonocardiograms and electrocardiograms of two cases of right bundle branch block. Upper phonocardiographic records unfiltered; lower records 1100 Low Pass filter. Time-marker indicating 0.2 and 0.04 second.

to be recognized audibly, although of possible serious diagnostic or prognostic importance, through amplification, and (2) the study of characteristic pitch variation of murmurs with the same time relations but of possibly different cases, by blocking out certain frequencies and amplifying the usually inaudible residues.

These added avenues of study, as well as the valuable asset of the great certainty of production of perfect records, is made possible by the use of an amplifying and filtering electrical stethoscope. The principles employed are the reception of the sound waves from direct chest wall contact by a soft rubber protected microphone, eliminating most

The accuracy of the filters was only approximate in that a 100 vibration per second tuning fork was excluded only by the 130 Low Pass filter and not by the 130 High Pass filter.

In addition to the amplifying stethoscope used originally by Gamble and his associates, R. B. Abbott<sup>17</sup> of Purdue used a similar instrument in 1922. Jacobson<sup>18</sup> in Germany describes one in use in 1924. Gamble and the constructing engineers for our instrument mention the possibility of its use in recording sounds graphically, but to our knowledge no previous records have been published; possibly because, as we found, certain technical difficulties had to be overcome prior to successful use for

this purpose; (1) the galvanometer fiber must be tense, as was noted by Lewis in using Einthoven's method (3 mm. produced 3.5 mm. deflection); (2) the current delivered for audible sounds was far too great for direct reception by the galvanometer fiber and had to be cut to 1/100 by resistance; (3) the time-marker, the electromagnetic tuning fork—wheel mechanism, had to be shielded with metal and the shield grounded to prevent gross aberrations from induced current in the amplifying mechanism. When

the time element was not especially desired, the time marking mechanism has been omitted from certain records to facilitate study of detail.

Exclusive of Gamble's report<sup>15</sup> at the American Medical Association in 1925, the article of Cabot and Dodge<sup>16</sup> is of greatest interest with regard to the frequency characteristics of murmurs. They conclude that, except for late diastolic (presystolic) murmurs, other organic murmurs vary in frequency between 120 and 660, occasionally lower.

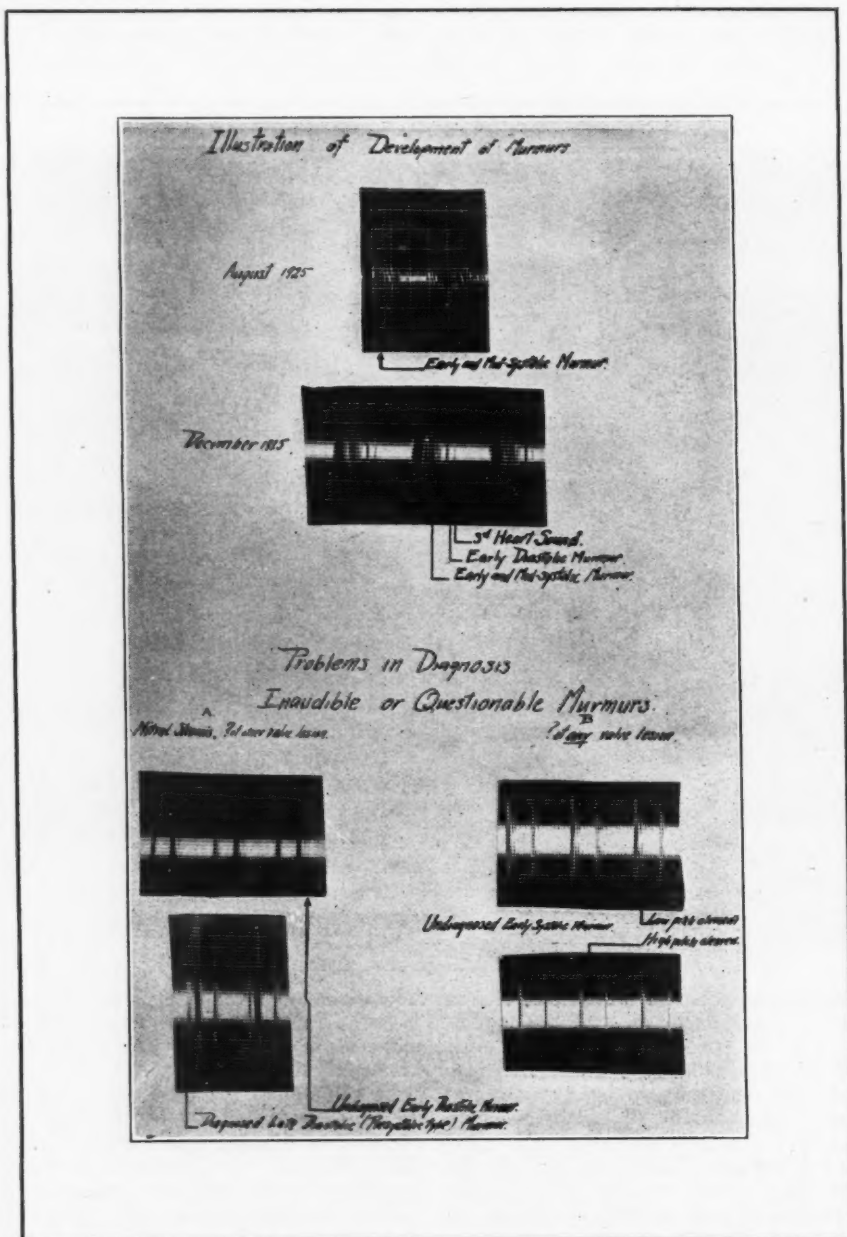


Fig. 3.—Upper two phonocardiographic records illustrate change in character of murmurs over a period of four months in a case of rheumatic heart disease with mitral insufficiency and stenosis. Case A (Case 1 in text) and Case B (Case 2 in text) illustrate problems in diagnosis. Upper record Low Pass filter; lower record High Pass filter.



The records which are submitted represent several isolated illustrations of the possible value of the application of such graphic means.

I. A series of records on mitral stenosis confirm several facts previously demonstrated by other workers and some that are apparently new. (See Fig. 1.)

(1) We constantly found a murmur in mid-diastole, directly succeeding the third heart sound, if this were present, even when no presystolic mur-

nificance, and our records show it with greater consistency than previous observers. It is present in some cycles in every clinically diagnosed case of mitral stenosis which we have recorded.

(2) The so-called presystolic, late diastolic, murmur is present in most adults without auricular fibrillation, and is characterized by a fairly consistent crescendo-decrescendo quality with the decrescendo phase occasionally succeeded by a very

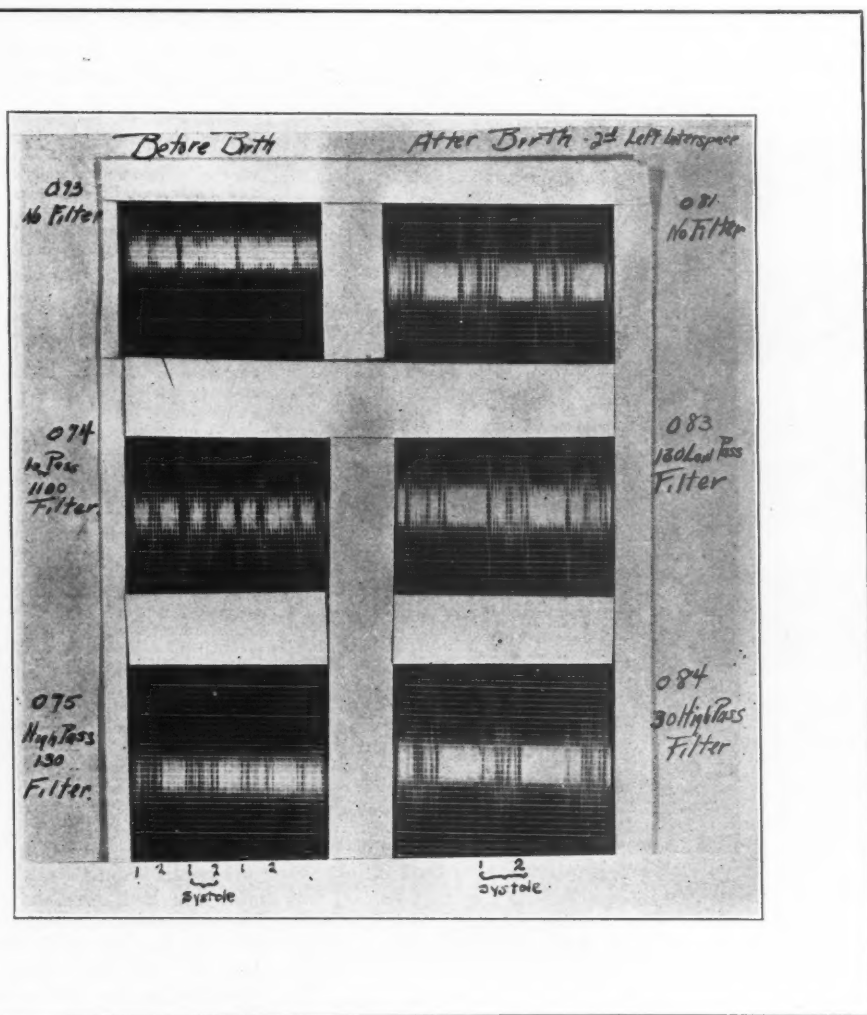


Fig. 4.—Phonocardiographic records before and after birth of Baby W., referred to in text as Case 3. Note consistency of total systolic murmur in the High Pass filter both before and after birth. Definite evidence of an organic lesion. See Column 3 of Fig. 6.

mur existed clinically, as is generally noted in children and in cases of auricular fibrillation and flutter. It is usually low pitched.

This early mid-diastolic murmur has been recognized since the time of J. B. Williams in 1828, and Graham Steele and Mackenzie have done much to establish its diagnostic value. Lewis<sup>6</sup> records it and Wiggers and Dean<sup>10</sup> noted it. White and Wood<sup>20</sup> have especially stressed its diagnostic sig-

short pause before the first sound. This emphasizes the rationale of the term "late diastolic" rather than presystolic. Presuming, as shown in the close relationship of this murmur to the upstroke of the "a" wave in the jugular tracing, that it is caused by auricular systole, we would expect the longest presystolic pause to occur in partial auriculo-ventricular block (Lewis<sup>6</sup> quoting Mackenzie).

(3) The third heart sound which directly pre-

cedes the early diastolic murmur has been well demonstrated by Thayer,<sup>21</sup> Lewis,<sup>6</sup> Eyster,<sup>10</sup> Gibson,<sup>22</sup> Kahn,<sup>4</sup> and others. Our records confirm previous ones, in that the third sound and the diastolic murmur which immediately succeeds it, is associated with the preceding cardiac cycle, a phase of "active diastasis." It not only occurs in close time relation to the H wave in the jugular pulse, but seems to bear some relation quantitatively to it.

Lewis<sup>7</sup> observed two phases to the first sound in bundle branch lesions, and felt that they were not due to the ventricular dissociation but rather to a presystolic element, the cause of which he could not explain.

It is interesting to note that the total duration of the two phases of the first sounds in our records coincides very closely with the intraventricular conduction time, and suggests that this ventricular dissociation really is the cause for the split sound character. (See Fig. 2.)

### III. Two cases referred for opinion regarding possible inaudible murmurs:

CASE 1—F. H. No definite infection. Some questionable symptoms of congestive failure. Slight enlargement of left ventricle. Difference of opinion of clinician, (1) presystolic and early systolic murmurs; (2) loud first sound. No murmur. Record demonstrates low pitched apparently relative mitral early and midsystolic murmur (Case A, in Fig. 3).

CASE 2—Classical mitral stenosis on acute rheumatic fever basis. During period of infection with moderate congestive failure an early diastolic murmur was heard. Entirely cleared at period of discharge when free of any definite congestive failure. Record demonstrates an early diastolic murmur; heard previously second left interspace. Question of Graham Steele or early aortic insufficiency (Case B, in Fig. 3).

CASE 3—Baby W. Murmur intrauterine; high-pitched total systolic and early diastolic. Unusual for fetal heart murmur types. Classical pulmonic stenosis after birth (see Figs. 4 and 5). Impossible to diagnose prenatal because of (1) tachycardia, (2) faintness, and (3) unfamiliarity with normal variations of the fetal heart sounds. The latter factor is of chief importance, and work is now being done to clarify it. Importance of diagnosis of intrauterine fetal heart pathology is twofold: (1) study of causes of congenital lesions and (2) prevention of fetal death by prolonged labor with too great pressure on fetal head in infants known to have congenital heart lesions.

IV. Cabot and Dodge<sup>16</sup> place little importance on audible filtered murmurs, claiming that except for low-pitched "presystolic" murmurs, all organic murmurs are both low and high pitched. The conclusions on our findings in at least one instance of the field of clinical differentiation differ from the above in that there seems to be a certain characteristic sound picture with relation to certain frequencies. With special reference to the high-pitched element, we may critically review the four types of systolic murmurs heard at the apex. (See Fig. 6.)

(1) The relative mitral insufficiency shows an early decrescendo phase.

(2) The organic rheumatic mitral insufficiency shows an early and a late phase.

(3) The transmitted aortic sclerosis or mitral sclerosis shows less prominent early decrescendo and a late crescendo phase which is much in preponderance.

(4) The congenital pulmonic stenosis shows a

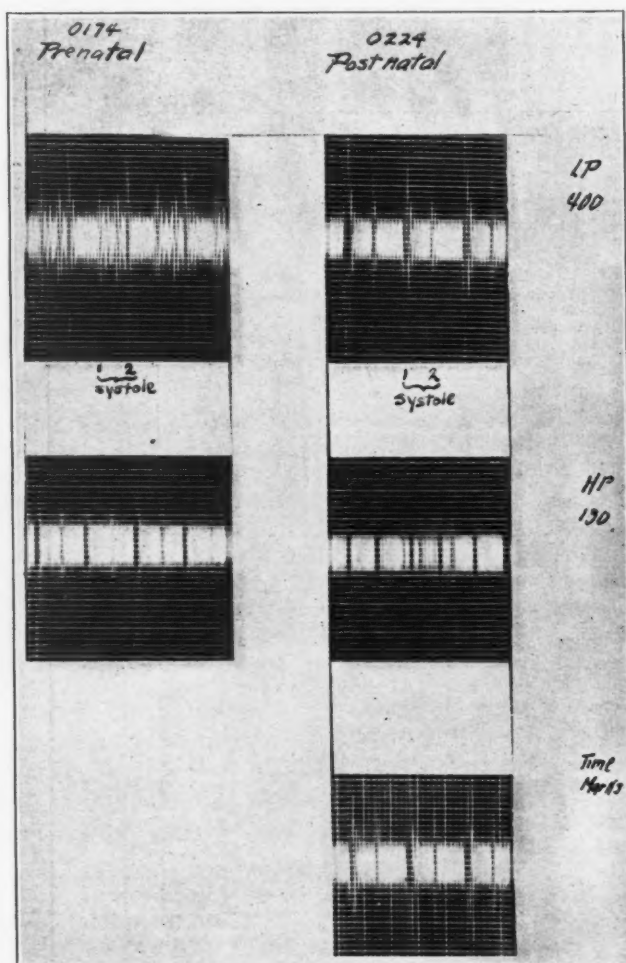


Fig. 5—Baby W., records taken before and after birth. Note presence of total systolic murmur in Low Pass filter before birth and absence in all other records. This baby was clinically normal. Contrast with Fig. 4. (Figs. 4 and 5 taken from article on "Phonocardiography of the Human Fetus" in American Heart Journal, on press.)

Its time relationship as well as its magnitude varies slightly with respiration, as would be expected from the effect of the changes in pressure in the thorax, an event probably closely dependent on relative auricular and ventricular pressure relations.

(4) The early diastolic murmur is recorded with much greater frequency than is noted clinically.

II. Intraventricular and bundle branch lesions are known clinically to produce a split or slurred first sound.

fairly level total systolic murmur with little fluctuation unless there is a midsystolic emphasis.

These characteristics are not offered as diagnostic formulae, but simply indicate the path for the accumulation of data along certain lines. They may very shortly, however, be valuable diagnostic aids.

In conclusion, it is believed that in this method of recording heart sounds there is a relatively precise aid, as simple to apply as the electrocardiograph, (1) in reaching clinical decisions of doubtful valve lesions; (2) in confirming such doubtful impressions as the quality of a sound and giving the clinician an organized knowledge that what he hears he knows exists because he can obtain graphic proof and has available similar records for comparison; and (3) in studying from the academic standpoint certain sounds and murmurs whose genesis is still in doubt.

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All women entering the University of California are given a physical examination, and those who are thirty or more pounds overweight, or twenty or more pounds underweight, are referred to Doctor Elliott, assistant physician for women. After determining that their weight problem is not due to any specific cause, she prescribes diet and health rules for them.

"The overweight girls usually need only to change their diet; but the underweight girls are a real problem. They

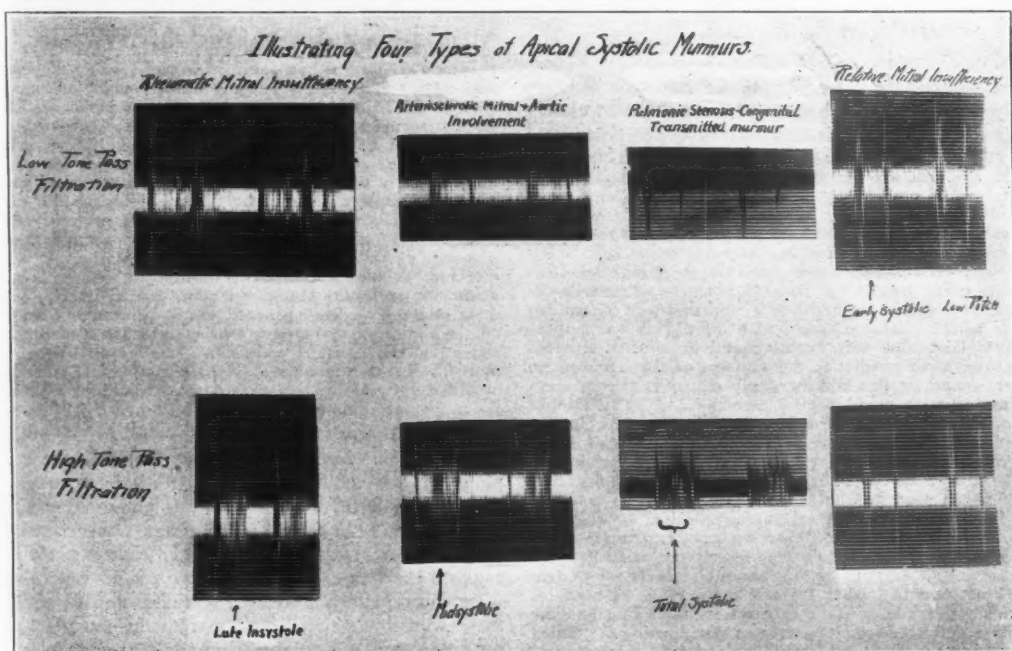


Fig. 6—Phonocardiographic records illustrating four types of apical systolic murmurs. The sound pictures in the High Pass filters seem to be more characteristic of the pathological lesion. Note the appearance of the benign relative mitral insufficiency murmur in the Low Pass filter alone. Note resemblance of murmurs in Column 3 to those in Fig. 4.

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are often proud of their underweight, due to the fact that they have accepted a style standard which rejects the normal health weight," says Doctor Elliott. "They may be anemic or be in a condition which would make them more susceptible to sickness."—U. C. Clip Sheet.

Thus fashion fashions us.

**Antipressor Fraction from Liver Tissue and Its Physiologic Action**—The clinical results obtained by A. A. James, N. B. Laughton and A. Bruce Macallum, London, Ontario (Journal A. M. A.) with liver extracts have been gratifying. In some patients the depression in blood pressure was very gradual, and the lowest point was reached many hours after the injection. In other cases the effect was immediate and persistent. The chemical nature of the depressor substance is unknown. However, the effects of tetra-ethyl-ammonium compounds on the blood pressure in dogs more nearly resembles those obtained by the use of liver extracts than do other known depressor substances.



## TORSION OF THE TESTICLE

## REPORT OF TWO CASES

By THOMAS E. GIBSON\*

DISCUSSION by Henry A. R. Kreutzmann, San Francisco; A. J. Scholl, Los Angeles; Robert V. Day, Los Angeles; L. P. Player, San Francisco; Charles P. Mathé, San Francisco.

## INTRODUCTION

**T**ORSION of the testicle, also known as torsion, volvulus, or strangulation of the spermatic cord, is a condition caused by sudden twisting of the cord shutting off the blood supply of the testicle and epididymis. It is of comparatively rare occurrence, judging from the paucity of cases reported. The records of the University Hospital do not contain a single instance of this condition. Apparently the first recorded case is that of Delasiauve, reported in 1840. O'Connor in 1919 collected 124 instances of the condition from the literature.

## CASE REPORTS

Undoubtedly the rarity of the condition is more apparent than real, because the condition so closely simulates epididymitis and is often so diagnosed.

(1) Such was the case of a Mexican boy, 17 years of age, who entered my service at the San Francisco Hospital on September 14, 1925, with a diagnosis of acute epididymitis and orchitis. He gave a history of being awakened from a sound sleep the previous night with sudden severe pain, swelling and tenderness of his left testicle. His temperature, however, was normal. His white count was 14,600 with 87 per cent polymorphonuclear leucocytes. He had had a similar attack a year before which quickly subsided with the aid of hot applications. His urine was negative and he denied venereal disease. On examination the contents of the left scrotum were found swollen and extremely sensitive, so that accurate palpation could not be accomplished. The skin of the scrotum was reddened and edematous. As far as could be determined the epididymis was situated in its normal position posterior to the testicle. The testicle was retracted somewhat higher than normal. On rectal examination the prostate and seminal vesicles felt normal and their secretion was normal microscopically. *A diagnosis of torsion of the testicle was made. An attempt at detorsion was unsuccessful.* Operation was decided upon, but owing to delay in getting parental consent the patient was not operated until September 16, 1925. A high incision was made over the external inguinal ring and the testicle delivered from the scrotum. On opening the tunica vaginalis about 15 cc. of blood-stained fluid escaped, and the testicle and epididymis were swollen and blue-black in color. The cord exhibited an intravaginal twist of 360 degrees in a clockwise direction. After detorsion and hot applications the testicle and epididymis showed no return to normal color, but nevertheless it was decided to leave the organ in situ rather than to remove it in

the hope that there might be some return of function. Accordingly the testis was fixed in normal position by sutures to the parietal layer of the tunica vaginalis, and the latter was fixed in turn by sutures to the scrotum. The incision in the tunica vaginalis was closed with catgut. The wound healed without reaction. The postoperative temperature went to 101 degrees F., but dropped to normal on the third day. The patient was discharged on the eleventh day postoperative. The testicle and epididymis still remained hard and swollen as before operation, but the pain and tenderness had entirely disappeared. The patient when seen at my office four months after operation showed complete atrophy of the testicle.

(2) F. S., age 19, gave a history of severe pain in the left groin and testicle, coming on suddenly while lifting a heavy roll of carpet. His temperature was normal. He denied venereal disease and examination of his urine was negative. The prostate and seminal vesicles were normal on rectal palpation, and their secretion was microscopically normal. The patient was seen with Dr. Ralph Soto-Hall on the eighth day after onset, and on examination revealed a tense, swollen testicle retracted upward toward the external inguinal ring. The scrotum was not reddened or edematous. The epididymis seemed to be situated on the lateral aspect of the testicle. The pain and tenderness had subsided to some extent. Operation (April 2, 1926), revealed a small amount of blood-stained fluid in the tunica vaginalis, and the testicle swollen to about twice its normal size. The cord exhibited a slight twist of not more than one-half turn in a clockwise direction. The predisposing cause in this case could not be determined. Probably the exciting cause was cremasteric spasm. The testicle and epididymis did not exhibit the blue-black gangrenous appearance of the first case, but was nearly normal in color. Apparently there was only partial interference with the circulation. It was therefore decided to leave the testicle in situ, so after detorsion the usual bottle operation for hydrocele was done and the testicle anchored to the scrotum. A communication from the patient four months after operation states that the testicle is very much smaller than normal, and causes him a good deal of pain at times. Evidently orchidectomy rather than orchidopexy would have been the proper procedure in this case.

## ETIOLOGY

Age appears to be an important factor in the etiology of this condition. The condition may occur at any age, but 75 per cent occur under 20 years. In O'Connor's series the average age was 13 years 4 months. Seventy occurred on the right and fifty-four on the left side. Seventy-two of his 124 cases were incompletely descended testicles, and three of these were intra-abdominal. Strangely enough, the condition comes on most commonly during sleep. In some cases it follows trauma or strain. It is said that torsion cannot occur with the normal testicle; some congenital anomaly or defect must be present. The congenital factor, according to Keyes, Collings, and, Campbell, is an undue mobility of the testicle. They state that probably an unduly long and lax gubernaculum is present in all cases. Spastic contraction of the cremaster muscle seems to be the exciting cause in some cases (Turner). In the intravaginal type of torsion the anatomical defect appears to be, as Lauenstein emphasizes, as unduly long mesorchium with a capacious tunica vaginalis, so that the condition may be termed "floating testicle." Instead of a broad band of attachment between the testicle and parietal tunica there is a narrow, stalk-like attachment of testis to cord, like a cherry on its stem, so that torsion is easily excited.

The latter condition was well exemplified in case (1), here reported.

## PATHOLOGY

Torsion of the testicle may be acute or recurrent,

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and intravaginal or extravaginal. In the acute type the condition persists and the testicle undergoes atrophy. Rarely does it slough or become infected, requiring removal. In the recurrent type, spontaneous detorsion occurs or the patient learns to accomplish detorsion before the testicle is permanently damaged. More or less atrophy generally results after one or more recurrences.

The torsion may be in the cord within the tunica vaginalis or in the cord above the tunica vaginalis. The former composes the vast majority of cases. There may be one-half to five complete turns in the cord. The rotation may be in either direction, but is usually clockwise for the left testis, and counterclockwise for the right. There is always a moderate amount of blood-stained fluid in the tunica vaginalis. The scrotum is usually edematous and reddened. The blood vessels are thrombosed and there is total infarction of all tissues. On section no trace of normal tissue is seen, the whole organ resembling a blood clot.

#### SYMPTOMS

In the acute type there is sudden onset with severe pain in the testis, often radiating along the inguinal canal down the thigh or into the pelvis. There is often vomiting, which may even be stercoraceous, with more or less shock and prostration. As a rule there is no fever, but the temperature may be elevated one or two degrees. The testis is very tender at first. Pain, tenderness, and swelling persist for many days, but gradually subside and atrophy supervenes. The scrotum usually twelve to eighteen hours after onset becomes reddened and edematous, and palpation is difficult. Instances are reported in which no pain or prostration occurred. Symptoms are usually less severe in the recurrent type of torsion.

#### DIAGNOSIS

Torsion of the testicle must be differentiated from acute epididymitis and strangulated hernia. As stated above, the condition probably often runs its course with a diagnosis of epididymitis. Torsion of the cord probably explains many cases of "spontaneous atrophy" of the testicle and unaccountable atrophy following "epididymitis." When the house officer had seen case (1), herein reported, he recalled a similar instance in which the testicle later atrophied for some unknown reason in a patient who was given a diagnosis of acute epididymitis. Orchitis followed by atrophy may occur in certain diseases such as mumps, but usually the connection is quite clear. Ordinarily the diagnosis of torsion is not difficult if the condition is only borne in mind. A diagnosis of strangulated hernia or epididymitis should never be made without thinking also of torsion of the testicle, especially in subjects under 20 years of age. The history is important. Antecedent mobility, incomplete descension, muscular strain or sudden onset during sleep, and absence of venereal history are important presumptive factors. Prostatovesicle infections of nonvenereal origin often exist to complicate the diagnosis. A normal urine, normal prostate and vesicles, and normal semen are likewise important. If a patient has had gonorrhea the difficulty of diagnosis is manifestly enhanced.

On examination one finds a swollen, tense testicle

with reddened edematous scrotum, in which testis, epididymis and tunica vaginalis cannot be differentiated. An important point to bear in mind is, that torsion causes shortening of the cord so that the testicle is lifted well up toward the external inguinal ring. Edema of the scrotum is not marked as in epididymitis. Torsion is not attended by the early onset of chills and fever, characteristics of epididymitis.

Strangulated hernia is unusual in youth, and is characterized by greater systemic shock, absolute obstipation and rapidly increasing intoxication, with vomiting of increasing severity. In torsion general symptoms are not so marked, and though acute at first, they gradually subside instead of growing worse. If the testicle is absent from the scrotum a diagnosis of torsion must strongly be considered in differentiating strangulated hernia, incarcerated omental hernia, or appendicitis. A coincident Richter's hernia can hardly be excluded as a possibility.

#### TREATMENT

The treatment of torsion of the testicle offers three possibilities: (1) detorsion, (2) orchidopexy, and (3) orchidectomy.

Detorsion may occur spontaneously or may be accomplished by the patient himself, or the physician in exceptional cases. It is much more advisable in these cases, however, to accomplish this by operation and at the same time to suture the testicle in place (orchidopexy) as was done in the case reported, because recurrence and ultimate atrophy, more or less complete, are almost inevitable. Operative detorsion and orchidopexy is the procedure of choice if it is accomplished within a few hours of the onset of torsion. Putzu states that if the patient is operated on within thirty hours the testicle can be saved. Keyes et al. from experiments on dogs place the limit at forty-eight hours. If hot applications do not restore the circulation in the testis immediately following detorsion the patient's convalescence will be shortened by performing orchidectomy. In most cases that have come to operation the testicle has been removed because of its gangrenous appearance. Massa reports a case operated on within two hours of onset with complete recovery.

If the case has gone beyond the time limit, the testicle may safely be left alone to go on and atrophy. It need not be removed unless there is a coincident hernia, in which case infection and sloughing is more apt to occur. However, in industrial compensation cases where time is an important factor the patient will get back to work sooner if the testicle is removed. If the other testicle is excessively mobile it should be fixed as a preventive measure.

It is quite apparent, therefore, that early operation in torsion of the testicle is an urgent indication necessary to save life, not that of the patient but that of the testicle, as a very short time is required for the occurrence of ultimate atrophy.

#### CONCLUSIONS

1. Torsion of the testicle is a condition in which the testis is rotated about its long axis so as to cut off its blood supply.
2. Two cases of torsion of the testicle are reported.
3. The condition is probably not as rare as it is

generally considered because it is often mistaken for epididymitis. Many instances of unaccountable atrophy of the testis following supposed "epididymitis," or "orchitis" are undoubtedly cases of torsion of the testicle.

4. Seventy-five per cent of cases occur under the age of 20 years, but it may occur at any age. It commonly occurs during sleep, but may follow trauma or muscular strain. Some congenital defect is a necessary prerequisite for the occurrence of torsion. Undue mobility, a lax gubernaculum, cremaster spasm, and stalk-like attachment of the testis to cord with capacious tunica vaginalis are given as some of the predisposing causes of torsion.

5. Diagnosis is often not made because the condition so closely resembles acute epididymitis.

Differential points are absence of febrile reaction, and high position of testicle due to twists in the cord. Nonvenereal history and negative prostatic-vesicle secretion are likewise important. Strangulated hernia must also be differentiated. The prostration, obstipation, intoxication, and vomiting of intestinal obstruction, as well as the general age incidence, serve to exclude the possibility. The diagnosis is usually not difficult if the condition is only borne in mind.

6. The treatment of torsion of the testicle is an emergency procedure. Immediate operation is absolutely essential to avoid complete and permanent damage to the organ. Unless the circulation is restored within a very short time after the occurrence of torsion, the testicle will undergo complete atrophy. If at operation there is a quick return of circulation and normal color, the organ may be anchored in situ with sutures in such a way as to prevent recurrence. If the organ retains its dark color after detorsion and hot applications, it should be removed. If the torsion has been present for some time the testicle will atrophy and the patient will recover without operation, but operative removal of the organ will greatly shorten the period of convalescence, a factor of importance in industrial surgery.

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#### DISCUSSION

HENRY A. R. KREUTZMANN, M.D. (1195 Bush Street, San Francisco)—Doctor Gibson's excellent paper emphasizes a condition which even up to the present time is rarely considered not only by the urologist, but especially by the general surgeon.

We know that the predisposing factor is a congenital malformation of the testicular attachments. It is interesting to note that in all the cases reported the torsion has been unilateral, with no recurrence on the healthy side. This would lead one to believe that the anomaly is pres-

ent only on one side, notwithstanding the fact that the good testicle may also be lax and on examination appear prone to the torsion of its cord.

The diagnosis is not difficult to make if one keeps this condition in mind in all cases where there is sudden, acute swelling and pain of the testicle and its adnexa. The disease most likely to simulate torsion is epididymitis. However, in the former condition the temperature is usually low; whereas, in the latter case it is usually high and may be associated with chills.

The most important factor is to make an early diagnosis. Detorsion can then be performed surgically before necrosis has begun, and the testicle can thus be saved.

A. J. SCHOLL, M.D. (Pacific Mutual Building, Los Angeles)—This paper is clear and concise and gives the reader a good working review of the conditions present and the various methods of treatment. Torsion of the testicle or spermatic cord is of comparatively rare occurrence, but probably occurs more commonly than the short list of published cases suggests. The recurrent, more so than the acute type, is likely to be unrecognized, as it is occasionally confused with epididymitis or orchitis and at times treated as such. Cases of acute torsion are usually operated upon or else complete atrophy develops. A number of the patients with testicular atrophy who give a vague history of mumps or other acute infectious conditions associated with testicular swellings, very probably have had a torsion of the spermatic cord.

Torsion occurs more frequently on the right than on the left side. Testicular anomalies in general such as undescended testicle also occur more commonly on the right, which indicates that there is probably some anatomical factor peculiar to short spermatic cords that predisposes to testicular torsion. In most of the specimens of twisted spermatic cords it has been found that there is present some abnormality of attachment of the testicle to the spermatic cord.

ROBERT V. DAY, M.D. (Detwiler Building, Los Angeles)—Doctor Gibson's paper leaves little to add. While the classical condition known as "torsion of the testicle" is extremely rare, slight torsion as a sequela of Andrew's bottle operation for hydrocele is quite common. Rarely this may result from Winckelman's eversion operation for hydrocele. It may more rarely follow any operation in which the parietal portion of the tunica vaginalis testis is loosened and delivered outside the scrotum.

The urologist naturally enough in private practice does comparatively few primary operations for hydrocele, for the reason they are seldom referred; but he does see a considerable number who have had a "bottle operation," and it becomes necessary to reoperate on these to relieve the pain. Partial atrophy is not an infrequent finding as a result of the bottle operation. The distress is usually due only partially to a certain degree of torsion; much sclerosis and compression of the cord does the rest.

L. P. PLAYER, M.D. (384 Post Street, San Francisco)—Doctor Gibson's excellent paper is so complete that it leaves no opportunity for additional data.

Undoubtedly, torsion of the testicle is more common than the literature on the subject would leave one to infer.

Differential diagnosis from epididymitis and strangulated hernia is, in a measure, difficult, but bearing in mind the differential points mentioned at the conclusion of the paper, and realizing the importance of immediate diagnosis, if one is to preserve a functioning organ, open operation for verification and treatment is certainly indicated if the condition is even suspected.

Many surgeons operate acute cases of epididymitis and claim in its favor more rapid relief of pain, drop in temperature, earlier recovery, and better end functional results.

One may classify torsion of the testicle into two classes: those due to anatomical defects and those due to faulty replacement of the organ in the scrotum after operations for hydrocele.

I have seen two cases of atrophied testicle of the latter class where the epididymis lay anteriorly.

CHARLES P. MATHÉ, M.D. (844 Phelan Building, San Francisco)—Doctor Gibson's timely paper calls our attention to the fact that torsion of the testicle on account of often being overlooked occurs more frequently than generally accepted. It should always be borne in mind in making diagnoses of diseases of the testis, epididymis and



cord. A very important diagnostic sign is retraction of the testis in the scrotal sac.

The symptoms may develop in one-half, four to twelve hours after torsion. It is very important to operate early. When there is no appearance of gangrene the conservative operation of detorsion and orchidopexy, consisting of excision and resection of the tunica as in the bottle operation for hydrocele, will suffice. The adhesions that form between the testis and the scrotum will keep it in place. Dr. M. Chevassu of the Hospital Cochin has performed this operation with success on numerous early cases. If, however, the blue-black appearance of gangrene is encountered and there is the added factor of infection, the testis may slough readily. Therefore, it is best to do a radical castration in these cases. Not having the patient's permission for castration, the conservative operation was attempted by me in one such case. It required the radical procedure a few days later. As the author emphasizes, early immediate operation will often save the testis.

### THE PREOPERATIVE PREPARATION AND SURGICAL TREATMENT OF CARCINOMA OF THE PANCREAS WITH COMMON DUCT OBSTRUCTION

By LEO P. BELL \*

*Carcinoma of pancreas is usually not a rapidly growing neoplasm, and life can in some cases be markedly prolonged on comparative comfort by the palliative operation.*

*Operative mortality is greatly lessened by preoperative preparation, regional anesthesia or ethylene and post-operative care.*

*Absolute diagnosis can be made only by microscopic section. In case of doubt the patient should be given the benefit of exploration and cholecystogastrostomy, since it is not a harmful operation even though error is made in the diagnosis of carcinoma. Relief is always immediate and complete.*

*Cholecystoduodenostomy can be very simple or a very difficult procedure. It is not the operation of choice, for the following reasons:*

1. *Cholecystogastrostomy is a simpler operative technique.*

2. *Bile in the stomach is not harmful or disturbing to the individual, of which we have ample proof in an extensive series of gastroenterostomies.*

3. *Occasionally the suture line of a cholecystogastrostomy or duodenostomy will not heal readily and leakage occurs. Leakage in a cholecystoduodenostomy is always fatal.*

4. *A cholecystogastrostomy leakage practically never occurs. When it does occur it very seldom is fatal if recognized early and feedings are discontinued.*

*Failure of union of the anastomosis line often occurs in very cholemic and emaciated old individuals.*

*Delay and careful operative preparation have reduced the postoperative mortality from 10 and 15 per cent to between 1 and 2 per cent. It is most unusual for a patient to lose his life from delay. When this does occur surgery would have merely hastened death.*

*Insulin should not be used as a routine except in those individuals showing increased blood sugar or sugar in the urine. The efficiency of insulin when given as a therapeutic agent has not been definitely established.*

*DISCUSSION by Saxton Pope, San Francisco; Clarence G. Toland, Los Angeles; Emmet Rixford, San Francisco.*

**C**ARCINOMA of the pancreas is considered by all authorities as the most difficult to recognize of all upper abdominal lesions. There is no other

form of cancer so universally fatal as are those of the pancreas. Upcott compares carcinoma of the pancreas to tumors of the central nervous system in that a growth so small is heralded with such widespread symptoms. The deep-seated, comparatively inaccessible situation of the organ, coupled with the fact that there may be little or no gross evidence of impaired function even in the later stages of the disease are the fundamental causes for difficulty in making a timely and proper diagnosis. Because of its anatomic location, carcinoma of the pancreas is never recognized until it has invaded the surrounding tissues.

Anatomically the peritoneum intervenes between the pancreas and the surrounding tissue. The pancreas having no true capsule, the head of the gland is moulded to the side of the duodenum, the anterior surface being in contact above and on the right with the beginning of the transverse colon, as a rule without even the interposition of the peritoneum. The anterior surface of the body of the pancreas forms a considerable portion of the bed of the stomach and is in contact with the pylorus. The left end of the body is in contact with the spleen and is in close relation to the left suprarenal gland and the left kidney. It can readily be seen how lesions of carcinomatous nature in the pancreas can involve the terminal end of the common bile duct, the ampulla of Vater, the posterior wall and pyloric end of the stomach, the duodenum, hepatic flexure of the colon and the large blood vessels including the portal vein.

The patient with obstructive jaundice presents a diagnostic problem in which all of the lesions of the upper abdomen with which jaundice is eventually associated must be considered, namely: catarrhal jaundice, cirrhosis of the liver, common-duct stones causing obstruction of the common duct, carcinoma of the gall bladder, carcinoma of the common duct and ampulla of Vater, metastatic carcinoma of the liver, and chronic pancreatitis.

In a report of 145 cases of carcinoma of the pancreas reviewed at the Mayo Clinic by Mussey in 1908 and Eusterman in 1922, the typical syndrome is given as follows:

All exhibited the malaise, lack of appetite and loss of weight and energy common to carcinoma of the digestive tract, 44 per cent complained of pain, 24 per cent of gastric disorders, 41 per cent of jaundice, 80 per cent of the patients were males, the average age was 56 years, average weight loss twenty-six pounds, and the average duration of illness only a few months. In those patients who had developed jaundice the following symptoms were manifested pruritus, clay-colored stools, enlargement of the gall bladder, liver enlargement, gastric disturbance, pain, progressive icterus, olive-green or black jaundice, rapid decline of weight and strength, glycosuria in 10 per cent of cases, lowered sugar tolerance, and fat in the stools. The pancreatic functional tests are much too unreliable to use for diagnosis.

Neoplasma in the ampulla of Vater may produce obstruction of the pancreas as well as of the common duct. The duct of Wirsung carries the entire pancreatic secretion in 83 per cent of cases, the ducts of Santorini are the main ducts in 12 per cent, in

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54 per cent of which the ducts of Santorini act as the substitute for the duct of Wirsung. In certain cases the ducts of Santorini remain uninvaded by the neoplasm for a long period of time. Again the ducts of Santorini not infrequently connect with the duct of Wirsung. In these patients complete biliary stasis exists, while pancreatic drainage into the duodenum is not in evidence. While this is likely to be a rarity, it presents no technical interest over the usual case aside from theoretical interest. Most of the patients suffer from lack of pancreatic secretions in the intestines with a lack of pancreatic digestion, evidence by bulky frequent stools, showing an increase in the amount of fats and changed relationship between saponified and unsaponified fats and absence of adequate protein digestion. Therefore, these cases may proceed to a rapid death as a result of the pancreatic deficiency although the elimination of jaundice and biliary stasis has been accomplished by cholecystogastrostomy.

Horgan in an exhaustive study on the histogenesis of carcinoma of the pancreas feels that the carcinoma may arise in any one of the sources, namely, the ducts, the acini or the islets.

While a fellow at the Mayo Clinic preparing my thesis on experimental production and relief of common-duct obstruction for my degree of Master of Science in Surgery, I became interested in the problem of preoperative preparation of patients with obstructive jaundice because of the very high mortality from hemorrhage which then existed. From the correlation of the work of a number of experimental workers a technique of treatments was established. This work was later carried out extensively and successfully by Walters, both experimentally and clinically.

Such workers as King and Stewart believe that bile pigments in combination with calcium or with sodium are less toxic than the uncombined pigments, considering calcium a protective mechanism against the circulating pigments caused by obstructive jaundice.

King, Biglow, and Pearce conclude that obstructive jaundice produced in dogs results in a loss of calcium, the calcium being given up by the bone to neutralize the toxic bile pigments circulating in the blood stream and in the tissues. Such neutralization affords protection to the body, but may lead to secondary disturbances, for example: bradycardia and changes in the blood coagulation time. Calcium, therefore, seemed the best means of preparing for operation, patients with obstructive jaundice, since it not only reduces the coagulation time of the blood, but also decreases the toxemia produced by the circulating bile pigments.

The experimental work of Lee and Vincent proved calcium lactate by mouth to be only one-half as efficacious as calcium chloride intravenously, the effect of the former appearing in three days, of the latter immediately. Bearing these experiments in mind a technique was worked out by which 5 to 10 cc. of calcium chloride was administered intravenously. These injections daily are not harmful as pointed out by Walters.

Opie in extensive experimental work on toxemia from chloroform poisoning points out that carbohy-

drates act in a protective manner to prevent disintegration of the body proteins when the individual is in a state of toxemia. He compared proteins and fats in feedings of dogs poisoned with chloroform and found that those fed carbohydrates died last or not at all.

The preoperative technique outline is as follows:

1. The patient is put on high carbohydrate diet with as much candy and sweets as he can eat to prevent disintegration of body proteins.
2. Proctoclysis with glucose and sodium bicarbonate is given as well as 3000 to 4000 cubic centimeters of water by mouth in twenty-four hours to diminish dehydration of and eliminate bile pigments.
3. A daily administration of 15 cc. of 10 per cent solution of calcium chloride is given for two to four days, depending on the severity of the illness.
4. Blood transfusions should be given within two days if reduction of coagulation time is not immediate or if the patient is very anemic.

Walters in a later paper reported the cases of thirty-four patients prepared for operation by this method without a death at operation.

The Rowntree-Rosenthal test of hepatic function, and the Van den Bergh test of the amount of bile pigments in the blood are valuable aids in formulating surgical judgment and in managing patients with obstructive jaundice.

In all cases of chronic obstructive jaundice exploratory operation should be done, for, as Sir Berkeley Moynihan aptly says, "no one living is infallible in the differential diagnosis of obstructive jaundice; this diagnosis is always so difficult, the chance of a life saved so important that, however positive the evidence of malignancy may be, I now advise operation on all cases." The consensus of opinion of such men as C. H. Mayo, Erdmann, and Moynihan is that cholecystogastrostomy, by the following technique, is the operation of choice, as the bile does not interfere with digestion in the stomach, the mortality is lower, and the technical difficulties are not so great. A trocar is inserted into the gall bladder and it is emptied of stones if any are present, and careful examination of the cystic duct is made to see if it is widely communicating with the common duct. The gall bladder is then joined to the stomach about two to three centimeters back of the pyloric ring in the usual technique of a gastroenterostomy. In seriously obstructed cases the operation should be done under regional anesthesia or in combination with very light ethylene or nitrous oxide, great care being used not to unnecessarily traumatize the tissue and to prevent excessive oozing. An additional safeguard is the slipping of a piece of the large omentum around the line of anastomosis to prevent leakage.

Parenchymal tissue goes through a gradual process of destruction from mild cell injury through severe cell injury with fatty degenerative changes before complete destruction takes place. This is borne out by my experiments on twelve dogs, for the purpose of determining the destruction of parenchymal tissue of the liver during obstruction of the common duct and its later regeneration following the relief of the obstruction by cholecystogastrostomy. The probable case of parenchymal tissue destruction is poisoning by bile pigment, increased secretory function of the

liver parenchyma, as shown by ultimate destruction of parenchymal tissue as the chronicity of obstruction develops.

Destruction of parenchymal tissue depends on the duration of obstruction. After such destruction connective tissue rapidly proliferates and replaces the space formerly occupied by parenchymal tissue. Bile pigment is not toxic to connective tissue cells and apparently acts as a stimulant to new growth by irritative action. It seems to be toxic to endothelial cells of blood vessels as manifested by petechial and massive hemorrhage in the parenchymal tissue. The interlobular biliary capillaries of the liver apparently are stimulated to growth by bile pigment and increased intrabiliary pressure. Besides, there is an unexplained physiologic factor which causes the change of interlobular ducts into liver trabeculae as the metabolic needs of the gland increase or destruction of parenchymal tissue progresses.

After relief of obstruction complete regeneration takes place, the rapidity of which depends on the duration of obstruction. The newly formed liver parenchymal tissue, arising from the undifferentiated interlobular bile capillaries, is pushed outward from the vicinity of the peribiliary spaces and forms in trabeculae with the undestroyed liver parenchyma. The connective tissue undergoes the shrinkage of age, becoming shorter, narrower, and flattened. After two months there is little evidence of excess of connective tissue in the interlobular spaces; it is still present in the peribiliary spaces, but only in moderate amounts.

The bile capillaries in the peribiliary spaces are converted into liver trabeculae. As this process goes on bile capillaries are often seen far removed from the peribiliary spaces. These are surrounded by newly formed parenchymal tissue in most cases. It is readily seen that these bile capillaries before they are surrounded by the growths of parenchymal tissue form the peribiliary spaces. Two months after the relief of obstruction only a moderate excess of biliary capillaries is seen in the peribiliary spaces. The blood vessels are also slightly in excess. The duration of obstruction and the consequent amount of destruction of the liver parenchyma are the factors controlling regeneration, and from two to four months after relief of obstruction will be required for this process of regeneration, the time depending upon the damage to be repaired.

This rapid regenerative power lies in the ability of the mesoblastic undifferentiated cells of the biliary capillaries which, under stress of destruction, caused by common duct obstruction are capable of producing any type of tissue contained in the liver.

The problems, therefore, which face the surgeon in a given case of carcinoma of the pancreas are as follows: (1) The amount of parenchyma tissue destruction of the liver and duration of obstruction. (2) The extent of parenchymal tissue destruction in the kidney, manifested by nephrosis or acute nephritis. (3) The extent of cholemia of the circulating blood. (4) The toxic effects of bile on the central nervous system and on the heart muscle. (5) The position of the obstructing carcinoma of the pancreas in regard to obstruction of the pancreatic ducts. (6) Weight loss, and dehydration.

The mortality rate following operations for the relief of obstruction of the common duct varies very greatly in the hands of different surgeons. It will be high if a preoperative régime, similar to that outlined above, and careful postoperative routine are not followed. The postoperative routine is carried out in a similar manner to the preoperative preparation, depending on the rapidity with which the cholemia disappears.

As illustrations of some of the problems of surgical intervention in obstructive cases of carcinoma of the pancreas, four case reports are hereby presented from our clinic showing that complete or partial relief may be obtained and life comfortably prolonged by the palliative operation of cholecystogastrostomy with no immediate postoperative mortality.

All cases reported were prepared for operation by the intravenous use of calcium chloride, glucose and sodium bicarbonate proctoclysis and subcutaneous injections, water by mouth and high carbohydrate diet as outlined previously and by transfusions in two instances.

In a group of four patients three were men. The ages were 40, 54, 61, and 63, and each had the typical syndrome of gradually deepening jaundice, indigestion, loss of weight, clay-colored stools, occasional vomiting, and anemia. The duration of jaundice varied from nine days to three weeks before operative intervention. Each had complained of indigestion from one to two years previous to onset of jaundice. Three complained of pain in the epigastric and gall bladder regions.

Mr. G., age 61 years, at the time of operation on January 9, 1924, was well until two months ago. Since that time he has complained of failing strength, indigestion, and epigastric pain. He has no jaundice and has lost little weight.

Mr. N., 54 years of age, at the time of operation on February 16, 1924, apparently very well.

Mrs. N., age 62, at the time of operation on November 11, 1922, was relieved for three months. She died four months after operation.

Mr. S., 40 years of age at the time of operation on April 6, 1923, was very much relieved until August, 1923, at which time he grew progressively worse and died in March, 1924.

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#### DISCUSSION

SAXTON POPE, M. D.—Cancer of the pancreas is such a hopeless disease that anything we can do to ameliorate the condition of the patient is acceptable. No attempt to substitute pancreatic function is of much avail, but a relief of common duct obstruction with drainage of bile into the alimentary tract is the one service we can render the patient.

In the preparation of these patients at the University Hospital, we have supplied their calcium deficiency by the intravenous use of calcium chloride. Their glycogen content has been raised by intravenous glucose and insulin, and the usual preliminary measures combative of shock are universally employed.

Doctor Bell has spoken of cholecystgastrostomy as the operation of choice. We have done this anastomosis a few times, but in a series amounting to something over twenty cases in the past ten years we have found that cholecystoduodenostomy is a simpler and more logical operation.

It is strange that surgeons and physicians both have looked askance at this procedure as one too risky and difficult to be employed even in desperate cases. It is surprising how simple an open anastomosis between the

fundus of the gall bladder and the first portion of the duodenum can be made.

The viscus is in close anatomical relation to the intestine and more or less fixed to it by nature; while the movable pylorus is less readily fixed and sutured to the gall bladder. Bile in the stomach is, of course, no particular detriment to gastrointestinal function; however, it is physiologically improper and in poor taste to say the least. Let us drop down a few inches on the alimentary route and drain the gall bladder where nature intended it should drain.

The surgical technique is simplicity itself. A double line of sutures of chromic gut, with no fear of peritoneal infection resulting from the open lumina. If the suture line be water-tight at the finish, a rubber dam drainage (in Morrison pouch) is all that is necessary to insure freedom from peritoneal infection.

So far as I recall, without reviewing our hospital records, the operative mortality is about 10 per cent. The postoperative course of the disease extends from a few weeks to several months, and the comfort of the patient warrants this particular form of surgical interference.

CLARENCE G. TOLAND, M. D. (Pacific Mutual Life Building, Los Angeles)—I have thoroughly studied Doctor Bell's paper. I have not a thing to add. It is an extremely instructive paper and one that should be carefully read by all surgeons.

Doctor Bell was one of the first surgeons to become interested in the problem of preoperative preparation of patients with obstructive jaundice. Later he and Doctor Walters of Rochester, Minnesota, carefully worked out a technique that reduced the operative mortality of such cases to a very low point.

EMMET RIXFORD, M. D. (1795 California Street, San Francisco)—Having read Doctor Bell's paper on the preparation of patients for operation in carcinoma of the pancreas I can offer little in criticism beyond appreciative commendation. The scope of the paper, however, is far wider than is intimated in the title, for it includes a description of carcinoma of the pancreas which is classical and an epitome of valuable results of much experimentation in the field of pathological physiology of biliary obstruction, as well as a more than usually intimate account of the resulting damage of the liver and the regeneration of that organ.

It is difficult to evaluate the items of the suggested technique for preparation for operation in each case, for that can be done with finality only after careful tabulation of results of various procedures in a very large number of cases. It should find its field of application large in the wide range of affections causing obstructive jaundice and chiefly in cases of complete jaundice of long standing. On the other hand, it is less necessary in early jaundice. Better diagnosis, if not requiring so much time as to cause undue postponement of operation, will lessen the mortality with a simpler technique.

I am especially interested in Doctor Bell's account of the mechanism of regeneration of the liver. It has long been known that the liver possesses greater power of regeneration than any other tissue of the body, and since the liver is originally developed from the bile capillaries and the liver cells during life are constantly being renewed from the same source, regeneration is to be sought for from that quarter. The capacity for the liver for regeneration or rather, in this case, compensatory hypertrophy, may be well illustrated by a case in my personal observation in which the left lobe of the liver attained the volume of the normal right lobe after destruction of the latter by pressure of two intrahepatic cysts of septic origin.

On the question of choice of procedure in irremovable biliary obstruction the superiority of anastomosis of the gall bladder with the stomach over anastomosis of the gall bladder with the duodenum is not proved.

It should not be forgotten that carcinoma of the papilla or of the diverticulum of Vater is every now and then removable, as Abbe of New York pointed out many years ago, because persisting jaundice, the indication for operation, takes place relatively early. Care should, therefore, be taken during the conduct of the operation not to confound operable carcinoma of the papilla with inoperable carcinoma of the pancreas.

## - BEDSIDE MEDICINE FOR BEDSIDE DOCTORS -

An open forum for brief discussions of the workaday problems of the bedside doctor. Suggestions for subjects and discussants invited. Useful extracts from letters will be published.

### A BRIEF OF THE BEST MODERN PRACTICE IN THE TREATMENT OF PRIMARY AND SECONDARY SYPHILIS

**The Editor**—If the old adage that he who knows syphilis knows medicine is true, the cause of health is being better served than it was even a few years ago. It also has been said that every physician who sees ten patients a day sees at least one with syphilis, whether he realizes it or not.

This, the most destructive and expensive of all plagues that ever have affected the human race, appears to be decreasing in prevalence, at least in some of its phases.

Earlier more definite diagnosis and more intelligent treatment must be given the greater share in bringing about this encouraging situation, because surely more than 90 per cent of syphilitics are still the private patients of private doctors.

Every physician, whatever his experiences, will find something of value in this issue of *Bedside Medicine for Bedside Doctors*.

Suggestions are invited for other subjects, and a postcard will give any member a chance to take part in these discussions.

**Howard Morrow\***—The importance of the adequate and immediate treatment of early syphilis cannot be stressed too strongly. If the patient is deprived of this early and abortive treatment it may mean the difference between a cure and a life of ill health. Every attempt should be made to make a positive diagnosis at the time of the patient's first visit. Dark field examination of serum from the initial lesion is of great importance. It usually permits of a diagnosis many days or weeks before a positive Wassermann reaction occurs. I do not think that one is ever justified in instituting treatment as a therapeutic test in early syphilis. The results are seldom conclusive, and it may cloud the clinical and serological picture to such an extent that a positive diagnosis is impossible.

Once the diagnosis is made in primary syphilis we give the patient immediately 0.4 gm. of arsphenamin or 0.6 gm. of neoarsphenamin. Three such injections should be given during the first week and then weekly injections for one month. This series constitutes one course. After three months the course should be repeated, eliminating, however, the intensive treatment given during the first week.

As soon as the arsphenamin course is finished, mercury should be started. The best methods of giving mercury are by intramuscular injections or by inunctions. I prefer mercury salicylate for intramuscular use and give weekly injections for eighteen doses. Mercury is probably as important as the arsenical preparations in the treatment of syphilis. It finishes the work that arsphenamin has started. Every course of arsphenamin should be followed by a course of mercury. Mercury given hypodermically

or by inunction is almost universally used in conjunction with the modern preparations of arsenic. Some physicians prefer gray oil and a few advocate the use of the soluble salts of mercury.

A third or fourth course of arsphenamin and mercury might be necessary according to the result of repeated Wassermann reactions, clinical findings, and the spinal fluid examination.

Iodide of potash is of little value in early syphilis, as it has no effect upon the *treponema pallida*.

Sulpharsphenamin is inferior to neoarsphenamin and arsphenamin in early syphilis, and its use should be confined to congenital syphilis or to patients with early acquired syphilis when intramuscular injections are necessary.

Tryparsamide, like sulpharsamide, should not be given as a routine in early syphilis.

Silversalvarsan is still used in Germany, but it seems to possess no advantage over the other arsphenamins and its use in this country is being discontinued.

Bismuth preparations are of great value in the treatment of syphilis, but they are of greater value in late syphilis than in early infections. They clear up syphilitic manifestations as rapidly as mercury, but more slowly than the arsenicals. Bismuth compounds should not be used to abort syphilis. The greatest value of the bismuth preparations seems to be in those patients in whom mercury and arsphenamin have failed. The usual course of bismuth therapy consists of ten weekly intramuscular injections. Reactions after bismuth injections are milder than the reactions after mercury and arsphenamin.

In conclusion, there is little to choose between arsphenamin and neoarsphenamin. At least two courses of arsenic should be given, and each course should be followed by a course of mercury. An early diagnosis with an attempt to abort the infection should be our aim.

**H. J. Templeton\***—Two main factors determine success or failure in the treatment of early syphilis. They are, first, the time at which the diagnosis is made and, second, the faithfulness with which uninterrupted intensive treatment is pursued during the first year.

An extremely early diagnosis is a prime requisite for a complete radical cure. The earlier the diagnosis the higher the percentages of cures. The ideal time to begin treatment is in the first week of the chancre before the Wassermann has become positive. A diagnosis at this stage depends upon the

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demonstration of the spirochetes. This early diagnosis is so closely related to successful treatment that one might say, paradoxically, that the dark field is one of our most important therapeutic agents.

The next essential is about a year of continuous treatment. This should be carried out regardless of possible negative laboratory tests. The Wassermann reaction may become negative after the first course or may never have been positive at all, but treatment should be steadfastly continued. We should keep our patients under the influence of our various drugs constantly during the first, most important year. Rest periods have no place in the treatment of early lues, provided that the patient is robust, in good general condition and does not react badly to medication, for relapses will be bound to occur in direct ratio to them. Early syphilis should be treated most intensively. For the first course of treatment I prefer old arsphenamin, as I believe that it is somewhat more spirocheticidal than neoarsphenamin. For the later courses of arsenicals I favor neoarsphenamin as its continued administration is better borne. I give three injections of arsphenamin the first week, then weekly injections until six have been given. Starting a week prior to the last injection of arsphenamin I give weekly injections of .2 gms. of potassium bismuth tartrate until twelve have been given. Then eight weekly injections of neoarsphenamin followed by twelve injections of mercury salicylate a week apart. Another course of eight injections of neoarsphenamin followed by twelve injections of bismuth completes the year. All of the above courses overlap the next one by one week. I believe that this overlapping guards against relapses.

Bismuth has conclusively proved its merits as a spirocheticidal agent and ranks in value second only to the arsphenamins. It would seem to excel mercury not only experimentally, but in clinical effectiveness. However, it does not relegate mercury to oblivion. By alternating bismuth and mercury between courses of the arsphenamins we can attack the spirochetes in a new vulnerable spot each time. This rotation keeps them from becoming immune to the action of our drugs. Bismuth can very effectively take the place of the arsphenamins in those patients who develop an intolerance for arsenic. It has been proved that bismuth can of itself cure secondary and primary syphilis, although it is inferior in this respect to arsphenamin.

We should not overlook the natural resistance of the patient. He should be put in first-class general condition at the onset of treatment and should be so maintained by general hygienic means throughout the whole course. The dosage of the various drugs should be adjusted to meet his individual tolerance.

**Hermann Schussler, Jr.\***—The following plan of treatment has proved so successful in my hands that I have no hesitation in recommending it for use in early syphilis.

The patient comes twice a week for eleven weeks,

which is the duration of each course. At the first eight visits he receives an intravenous injection of neoarsphenamin. At the remaining fifteen visits he receives an intravenous injection of novasurol. An intramuscular injection of bismuth is given with each dose of neoarsphenamin, and with the first four doses of novasurol, making twelve doses of bismuth in all. At the end of the course, a rest of one week is allowed, after which a Wassermann test is done, and the next course of treatment begun at once. Each course, with the rest period, covers three months, so that four full courses are given in one year. A year's treatment, therefore, includes thirty-two doses of neoarsphenamin, sixty doses of novasurol, and forty-eight doses of bismuth. I have yet to see a primary or secondary case of syphilis requiring more treatment than this for cure, as we understand the word "cure" at the present day.

Neoarsphenamin is the safest and most convenient arsenical, and when given twice a week in full doses it is therapeutically equal to arsphenamin. The initial dose is 0.6 g., and the others are increased to 0.9 g. if well borne. The dose is dissolved in the ampule in cool, freshly boiled water, not over 3 cc., and the patient is not "prepared" by fasting or catharsis.

Novasurol is given intravenously without dilution, as it is not irritant. The first dose is 0.8 cc., the second 1 cc., and the rest 1.2 cc., which is the full contents of an ampule, representing  $2/3$  grain of metallic mercury. I have ceased employing insoluble intramuscular injections, and I never expect to employ either of them again. Intravenous novasurol has opened up entirely new possibilities in mercurial therapy. I have never seen renal irritation result from it.

Bismuth as an antisiphilitic remedy has come to stay, and should form a part of every routine course, as it will kill the spirochetes that arsenic and mercury have spared. It can only be used intramuscularly, and is practically painless. Being rather slowly absorbed it replaces insoluble mercurial injections as "depot medication." My favorite preparation is bismudol, which is clean, convenient, effective and remarkably well borne. As x-ray studies have shown that the bismudol shadow takes six weeks to disappear from the gluteus muscle, the patient is never wholly without medication during the year. Far from being a disadvantage, this is very desirable, as Doctor Templeton has shown. One of the most important parts of the treatment, and one often neglected, is the complete eradication of all foci of infection, which are important causes of severe toxic reactions from neoarsphenamin, and tend to keep the Wassermann positive indefinitely.

Fully 90 per cent of the early cases thus treated have become Wassermann negative after one course as described, and none has remained positive after two courses. The four courses should always be

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dren's Clinic, 1921-26; Visiting Pediatrician, Stanford Service, San Francisco Hospital, 1922-23. Present hospital connections: St. Luke's Hospital, Health Center, in charge of Syphilis Clinic (since March, 1924). Scientific organizations: San Francisco County Medical Society, C. M. A., Fellow A. M. A. Practice limited to Internal Medicine. Publications: Two papers on "The Intensive Treatment of Congenital Syphilis," both published in California and Western Medicine, August, 1922, and April, 1925 (with H. K. Faber); "Lelshmaniasis in the United States," J. A. M. A., January 13, 1923.



given, however, and a Wassermann should be done twice a year for three additional years. Examination of the spinal fluid is also advisable, and should be done at least once before dismissal. In conclusion, I feel certain that if every early syphilitic were given treatment of the extent and character described above, such conditions as aortitis, aneurysm, tabes, and paresis would become a memory.

**Franklin Farman \***—In early primary and secondary syphilis it is possible to obtain both a clinical and serological cure in the great majority of cases, provided extensive treatment is followed through by the patient and physician.

It is well to undertake the treatment with a definite plan or course of medication outlined in advance in order to enlist the full co-operation of the patient. Deviation from a standard routine of treatment oftentimes must be made if the individual patient has an intolerance for any of the anti-spirochetal drugs—arsenic, mercury, or bismuth. The multiplicity of the preparations of these drugs makes selection more or less a matter of personal choice.

My plan of treatment of early syphilis is instituted only after a positive diagnosis has been made, based upon a correlation of the history, clinical manifestations, Wassermann tests, and dark field findings (if a chancre-like sore is present).

I first give an intravenous injection of neoarsphenamin 0.4 gm. This is followed by two more injections in rapid succession, about three days apart, increasing the dosage usually to 0.6 gm. From then on regular weekly injections of neoarsphenamin 0.6 gm. are administered until a total of ten injections have been given. After the third injection of neoarsphenamin some form of mercury medication is started. Recently I have been using bichlorid of mercury, grain one-half, in an oily base. I believe that mercury salicylate is more efficacious, but it frequently produces gluteal soreness and discomfort. Intramuscular injections of some form of mercury are given once or twice per week over a period of two or three months, guarding against overmercurialization, manifested generally by soreness of the gums, mild gastrointestinal upsets, or albuminuria.

Following the course of mercury the patient is advised to take potassium iodide for one month. I usually prescribe the potassium iodide put up in a palatable vehicle, so that the patient receives 20 to 40 grains per day.

Following the month of potassium iodide medication, the patient is allowed a complete rest from treatment. At the end of this time, about five to six months, a check-up Wassermann test is made. If positive, a second though less intensive course of arsenical and mercury medication is repeated. If negative the patient is advised to return within three months for further observation and tests, blood and spinal fluid Wassermann. From then on any further antiluetic treatment necessary is carried out as for a case of late syphilis.

My results with the above plan of treatment have been encouraging, obtaining in the majority of cases

of primary and secondary syphilis, apparent clinical and serological cures.

**J. A. Cooper \***—The use of bismuth in addition to the routine treatment of syphilis by arsphenamin and mercury is becoming a well-recognized procedure. There seems to be some difference as to whether a patient should be allowed a rest period or not. Where no rest periods are allowed my experience has been that the Wassermann becomes negative sooner and is less likely to become positive again.

In spite of the fact that the administration of mercury by mouth is universally condemned, it is remarkable how effectively it will act when so administered in solution. Binioidide is easily given in doses of 1/9 grain to the dram in combination with 3 grains of potassium iodide. People of moderate circumstances are too fastidious or too lazy to give themselves injections while they can hardly afford to pay to have these administered by an attendant. Quite often a person will be able to take this treatment regularly, when there will be obstacles preventing regular visits for hypodermic injections.

**Francis X. Voisard \***—The best modern practice in the treatment of primary and secondary syphilis is hard to write upon.

No two patients are alike. Often we come across a patient who will not respond to the arsphenamins when others will be greatly benefitted.

As a rule primary syphilis is better combated with the arsphenamins. If the treatment is started early there will be no secondary syphilis.

After a good whitewash I use the bismuth preparations, later mercury. No Wassermann blood test during the first year of treatment.

For the last two years I have used only one drug at the time: the arsphenamins, bismuth, mercury.

My objections to the conjoint mercurial and arsphenamin treatment are: (1) mercury will irritate the kidneys and inhibit their power to eliminate the arsphenamins; (2) the latter remaining longer and in a larger quantity in the liver; (3) will cause complications such as jaundice, dermatitis, etc.

With mercury watch the kidneys; with arsphenamins, the liver.

If the arsphenamins are contraindicated or do not bring results, I use bismuth or mercury. One can select the method best suited to the patient.

I use bismuth following the arsphenamins because it prolongs the effect of the latter on the treponema pallida.

Know your patient well: age, habits, urinary organs, heart, liver. And whatever drug you use, start with small doses; learn how much he can stand.

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\* Francis X. Voisard (717 California State Life Building, Sacramento, California). M. D. Victoria University, Canada, 1891. Graduate study: Two years in Hotel Montreal, Canada; one year French Hospital, San Francisco; six months postgraduate New York City; six months Hospital Nlecker, Paris, France; six months Hospital St. Louis, Paris, France. Practice limited to Urinary, Skin, Syphilis since 1904. Scientific organizations: A. M. A., California Medical Association, Sacramento Medical Society.

\* Franklin Farman (1501 South Grand Avenue, Los Angeles). M. D. Rush Medical College, 1917. Practice limited to Urology. Hospital connections: California-Lutheran, Anita Baldwin, and Hollywood hospitals, and Graves Memorial Dispensary.

Keep in mind that your clinical knowledge will be of great help to you and your patient. Make use of a competent laboratory if you can.

It is hard to set strict rules in treating syphilis, number of doses of this or that drug; your close contact with the patient will enable one to answer these questions.

Early treatment gives better chance to the patient; late syphilis very seldom is cured. A close watch over the patient will save him and you many disagreeable happenings. The organs of the body being subjected to such a severe and prolonged treatment must be looked at closely so as not to make the treatment worse than the disease.

I hope these few lines will be of some help to the family physician, who often sees the patient first; also those patients who cannot consult a specialist.

**Kenneth L. Dole** \*—I appreciate your sending this round-table discussion to me, and have enjoyed reading those contributions already included. I started to write down my experiences, when it came to me that my primary and secondary syphilis patients were too few to permit of intelligent conclusions. We don't get many of these patients. In five years I have seen only two true primary syphilids.

**A. E. Edgerton** \*—The situation today in the treatment of syphilis is more complicated than ever before. However, an attempt should be made to treat it thoroughly and systematically. The thought must be always in mind that syphilis is a systemic infection for an indefinite time before appearance of the initial lesion or chancre and should be immediately attacked by general rather than local measures. It should also be borne in mind that, even though the macroscopic evidence of syphilis disappears shortly after treatment has begun, it does not mean that destruction of the organism has taken place in all other parts of the body. Syphilis has been well called a relapsing disease.

The most important factor in its clinical management is early diagnosis, and the most certain and effective means of obtaining this is by dark field illumination. This, if positive or if one is suspicious of a hard chancre, is followed by intensive treatment with neoarsphenamin and mercury. My initial doses of the neoarsphenamin in the adult, if his physical condition will permit, is 0.9 gm. My treatment consists of an injection every four or five days until ten injections are given. Then mercury is given intravenously once a week for about fifteen doses. The preparation I usually use is mercurous in 0.1 gm. doses. Due to its low toxicity I find this preparation most effective. In patients in whom I do not use this preparation I employ the soluble solution of succinimid in 1/6 gr. doses intravenously.

An examination of urine is done once a week during the course of treatment with neoarsphenamin

and mercury in an effort to detect the first signs of evidence of kidney irritation.

In some acute cases following treatment with neoarsphenamin and mercury, I have followed up with a course of bismuth once a week for a period of two or three months, or potassium bismuth tartrate and butyn in 0.1 gm. doses. I find that bismuth, however, is more advantageous in the later stages of the disease.

If I am using iodides by mouth I use a saturated solution of potassium iodide, administering from 10 to 50 drops before meals on an empty stomach, or a solution of sodium iodide 30 gr. at a dose intravenously along with the mercurial treatment, especially if there is any evidence of involvement of the nervous system.

If after the first course of neoarsphenamin and mercury is given the blood report is positive, a second series of neoarsphenamin and mercury is administered, followed by a series of bismuth weekly for at least fifteen doses.

Neoarsphenamin is never given until physical examination has been made to determine as far as possible the activity of the process and the extent of damage. Wassermann tests are made at least every six months and for a period of three years after negative reports are received.

**Dan H. Moulton** \*—In the treatment of primary and secondary syphilis by the general practitioner the most important point is to get started as early as possible. Many patients come to us after having been "treated" by some "friend" or many times by a druggist who has scoffed at the idea of the lesion being syphilis.

The earlier we see the patient and make the diagnosis and get started on the proper treatment, the better the results, both temporary and permanent. I regret to say that I often lose sight of the patient after the initial lesion is cleared up.

The dark field examination of the initial lesion is of great importance, as the Wassermann test does not always assist us in the very early stages, but may deceive us with a negative finding. It is also important to have confidence in the laboratory making our tests. Having satisfied ourselves of the presence of primary syphilis, we must explain the importance of active and thorough treatment to our patient. He or she must be made to understand the necessity of not only the active abortive treatment, but the follow-up treatment for at least three years.

I give 0.6 gm. doses of neoarsphenamin twice a week for the first month, to be followed by mercury, either by inunctions or intramuscular injections of mercury salicylate, twice a week for two months. Then I give another course of 0.6 gm. neoarsphenamin once a week for a month, to be followed again with mercury for two months. It is often necessary to give the third course of neoars-

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\* **Dan H. Moulton** (Chico, California). M. D. University of California, 1902. Graduate study: Internship Sacramento County Hospital, New York Polyclinic, New York Postgraduate School. Practice limited to Surgery since 1903. Hospital connections: Euloe Hospital, Chico; Euloe Sanatorium, Paradise. Previous honors and services: Lieutenant-Commander U. S. N. R. F. M. C., 1918-19; Associate Chief Surgeon, Sacramento Northern Railway for twenty years; Examiner for U. S. Veterans' Bureau since 1919. Publications: "Treatment of Acute Polymyellitis," Cal. State J. Med., 1912.

phenamin to be followed again with mercury. Later I use the bismuth compound and try to keep in touch with the patient until a cure is effected. Wassermann tests should be made every six months for the next three years, and subsequent treatment given according to the laboratory findings.

The most perfect of health boards is powerless until its functions are set in motion by the family physician. Protection from contagious disease presumes the ability to recognize contagious disease. If the physician whose aid is sought be ignorant or a quack, the whole community is endangered through his failure to make a correct diagnosis. This is the basic reason for the practice of medicine. Protection of the ignorant from exploitation is of but secondary importance; the credulous will ever find means for their own undoing. Outside the realm of communicable disease the average man has little concern with the medical fads of his neighbor. If he have lumbago he may go to a Turkish bath, or to a psychoanalyst, or to a physician, and it is no one's business but his own. Yet if his child have diphtheria it is the vital concern of the whole neighborhood that other children be kept out of the house. But diagnosis of diphtheria is a matter of medical education. It is not inherited nor acquired by occult means. The state doubts the ability of uneducated men who have taken a few lectures, or a correspondence course, when it comes to the public question of recognizing cases of communicable diseases. The concern of the public is not whether an excess of huckleberry pie is best cured by adjusting the fourteenth dorsal vertebra or by a dose of castor oil; its concern is whether Doctor Quack, the renowned healer, knows a case of measles when he sees it.—New York Times.

The onlooker can see a great deal of the game. And I, for instance, though I claim no insight into pure science, can fairly claim an onlooker's experience of very many practical instances of science as applied to the needs of our civilization today. For some years past, in war and in peace, I have been privileged to have countless opportunities of examining at close quarters the concrete results of such applied science. In things military and naval, in factories, workshops, mines, railroads, in contact with the everyday problems of education, health, land-settlement, agriculture, transport or housing—in all such varied departments of human life, it has been borne in on me more and more that if civilization is to go on, it can only progress along a road of which the foundations have been laid by scientific thought and research. More than that, I have come to realize that the future solution of practically all the domestic and social difficulties with which we have to grapple nowadays will only be found by scientific methods.—From the presidential address of the Prince of Wales, British Association for the Advancement of Science, Science, August, 1926.

At a medical meeting in Wisconsin, following a discussion on periodic examination of apparently healthy persons, it was asked how many physicians present had been examined within the past year. Three of the seventy present raised their hands. It was pointed out that hardly a month passes but that some physician, dear to his friends and apparently in the prime of his life, suddenly drops from the ranks, and oftentimes from a purely preventable disease. It does not look well for medical men to urge periodic examinations of the apparently healthy when they themselves do not follow the advice given.—J. Indiana M. A., August, 1926.

It is not only in the works of fiction and of the imagination that one need look for drama, but the thread of romance can be traced now running bright, now less bright throughout every aspect of the all-absorbing study of man. That the mysteries of the human body form no exception to this rule is readily seen in the fact that from time immemorial it has been the aim of the student and the investigator to fathom the hidden things, and even down to our own times the revelations they uncover partake of the spectacular, nay almost of the unreal.—John B. Deaver, J. Iowa M. Soc., August, 1926.

## CLINICAL NOTES, CASE REPORTS AND NEW INSTRUMENTS

### REPORT OF A CASE OF URTICARIA PIGMENTOSA IN A YOUNG ADULT

By MERLIN T.-R. MAYNARD \*

Urticaria pigmentosa is rare, and in adults is rare enough to justify an individual case report. About 150 such cases have been reported during the past forty years. These patients always arouse interest, and in view of the distinct character of the disease competent dermatologists rarely fail to make the diagnosis.

The gross lesions are those of pigmented macules or papules or mixed lesions which on irritation respond with an urticaria-like reaction of itching and weal formation. The macules may or may not be the result of an initial nonpigmented lesion, but pigmentation, however, rapidly develops, rarely fades, and the response to irritation is not lost even in old lesions. Distribution is largely on the flexural surfaces; the face, palms, and soles are rarely involved. The normal skin likewise often produces a dermatographism. A biopsy shows typical features not found in chronic pigmented urticarial lesions and which, therefore, differentiate this disease from the not infrequent chronic form of urticaria.

Nettleship reported the first case of urticaria pigmentosa in 1869. His patient was a female child of 2 years, and his paper was entitled "Chronic Urticaria Leaving Brown Stains of Nearly Two Years' Duration." Unna later demonstrated mast cells in increased numbers in urticarias of the Nettleship type, and this established our present basis of classification. However, there are reports of clinically typical instances of the diseases without mast cells, and since mast cells occur in various conditions it is possible that their presence in urticaria pigmentosa may be a usual but not a necessary characteristic. It would seem, therefore, with typical symptoms and an otherwise consistent microscopic picture that, regardless of mast cells, a positive diagnosis is justifiable. However, repeated biopsies should be made because clinical phases and seasonal changes may shed new light on the occurrence or lack of occurrence of these cells.

As published case reports are very complete, and the diagnostic features and histopathology often repeated in the literature, their further review except as will be brought out in the discussion of my case is not essential.

#### CASE REPORT

Helen S., Italian housewife, 29, examined in 1923, and the diagnosis of urticaria pigmentosa made on the clinical appearance. The patient did not return, but was traced and returned at my request in January, 1926. The skin condition as far as I could remember was unchanged. The history given was that of onset at the age of 20. The initial lesions beginning on the left wrist on the flexor surface, as several hive-like spots, following the rough grasping of the wrist by a schoolmate. These did not subside, but became rapidly darkened and soon more began to appear, first on the wrist and then gradually over the body in the present distribution. The left wrist still is the most severely involved area of the body. The patient is of sturdy Italian peasant stock. There is neither history of a similar eruption nor other significant fact in any known member of the family. No serum has been given at any time, and patient was successfully vacci-

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nated in childhood and not since. The patient has never had previous "hives." For two years before onset the patient had digestive symptoms consisting of nausea and



Adult urticaria pigmentosa. The response to stimulation is not well shown.



Photomicrograph of section from a case of adult urticaria pigmentosa. The deeper staining stellate cells are mast cells. The perivascular arrangement is apparent.

flatulence after meals, and other symptoms being strongly suggestive of chronic gall bladder or appendiceal disease. Roentgen examination of the gall bladder region was negative, but a laparotomy in 1923 disclosed chronic appendicitis with adhesions, and one year later a second laparotomy was done for persistence of symptoms and many adhesions were freed. The gall bladder and other abdominal organs were considered normal. The general symptoms were somewhat abated, but the skin condition did not alter.

**Physical Examination**—The skin presents many lesions of freckle-like appearance, deep brown, round, split-pea size, rather discrete but closely placed, very few being confluent. They are slightly palpable and rather symmetrical in distribution. The greatest concentration of the lesions is on the flexures, the wrists, upper arm and above the knees, the ankles are thickly massed with spots, and the rest of the body is thickly massed with similar-appearing macules. The face, however, is apparently free, as are the palms and soles. The abdomen shows two laparotomy scars, one frankly keloidal, the other showing beginning hypertrophy. There are no scratches or other scars. The normal skin is definitely dermatographic, and when the lesions are rubbed an almost instantaneous change takes place in which each lentiginous lesion rapidly swells, deepens to a purplish tint and becomes frankly urticarial. This phenomenon is exceedingly striking. The wheals persist for a short time and then subside. They are almost immediately blanched by the injection of adrenalin locally, and even the most insignificant lesion of long standing changes to an active weal on irritation.

Other abnormalities found on examination were chronic infiltration of the tonsils, the thyroid distinctly enlarged of the parenchymatous type without signs of toxicity. The abdomen is slightly tender in the region of the cecum and in the right upper quadrant.

Microscopical examination of a lesion by the lesion by the right knee, including some normal skin, shows normal squamous granular and prickle cell layers. The basal layers show a distinct pigment capping, which is considerably increased in the area of the lesion. The papillae are normal and the vessels of the corium there are prominent. There is likewise some intercellular edema and throughout the corium there are numerous mast cells with a distinct tendency toward grouping around the vessels in the area of the lesion. The normal skin likewise shows an increase in these cells to a lesser degree, many of which show degenerative changes with a spilling of their granules into the tissue spaces.

The clinical and microscopic pictures are distinctly those of urticaria pigmentosa, a diagnosis which has been confirmed by several dermatologists who have seen the patient with me.

The most prominent factors are the mast cells and their distribution in the normal and pathological areas. There are found many degenerating mast cells with spilled granules. The mast cells are increased in the normal skin, and the epidermis itself is unchanged. The pigmentation is due to melanin and not to the mast cells as shown by the unstained sections. The distribution of the lesions with the rapid subsidence with rest or adrenalin injection, and the persistence of the pigment with the urticarial response to irritation regardless of the age of the lesions and the general dermatographism, make a complete picture. The tendency to keloids is interesting.

Treatment has been corrective and directed toward relieving the gastrointestinal symptoms. The prognosis is, of course, poor, but the patient is fortunately not greatly bothered by her lesions.

The sterilization act of Virginia has been upheld by the Supreme Court of that state. According to the provisions of the law it is possible for the board of directors of the state colony for epileptics and feeble-minded to sterilize sexually any person under state custodial care who is feeble-minded or an epileptic and able to procreate his or her kind. There has been much objection to these sterilization acts, but in reality most of the arguments advanced are not worthy of very serious consideration. On the whole the medical profession is in sympathy with sterilization acts that are prepared and enforced intelligently.—J. Indiana M. A., August, 1926.

## EDITORIALS

### DOES EVOLUTION APPLY TO THE LIVING CAUSES OF DISEASE?

If evolution influences man, monkeys, flowers and potatoes, may it not also apply to the minute microscopic animal and vegetable organisms that produce disease in their hosts?

Scientific and historical evidence supports the hypothesis. It is known that some diseases once active have disappeared and that others appear to be doing so. There are, of course, other reasons than evolution which could be and are being advanced to explain this phenomenon, but they do not explain what appears to be the occasional rise of a new disease or possibly the reappearance of an old one in an unrecognizable dress.

The theory that evolution applies to living causes of disease is to the fore again in scientific literature as an explanation of the disease variously termed encephalitis lethargica, epidemic encephalitis, contagious encephalitis, post-influenza encephalitis and, most incorrectly, "sleeping sickness."

At least in its present form this disease is less than ten years old. In that time it has invaded thousands of communities in practically every country in the world, and apparently is only in its infancy, either in prevalence or in the harm it may yet do to the human race. In searching for the cause, all sorts of hypotheses are being put forth for testing, and all sorts of experiments are being planned and executed.

Two well-known and careful students have recently seriously advanced the hypothesis that the extensive occurrence during the last few years "argues much for the evolutionary theory of the malady. *We are too apt to forget that evolution proceeds ever onward, and that side by side with the elimination of old diseases, new diseases may appear or reappear after long absence through the originating of a species of organisms hostile to man, or alternatively, by reason of the taking on of inimical parasitic function by a previously harmless saprophyte.*"

### MEDICAL SECRETARIES

The duties, legal exactitudes and other responsibilities of physicians, hospitals, and laboratories are becoming so numerous and complex that doctors must have competent technical assistants or devote a large share of their time to matters which ought to be attended to by less expensively trained assistants. Among the important services needed by individual physicians, groups, laboratories, clinics, hospitals, are:

**Better Business Methods.**—Next to ministers and farmers, doctors as a class are the poorest of business people, a trite statement but a fact. No one who loves his profession wants to see business methods and business ethics applied in medicine to a point where they may interfere with the art and spirit of a great calling, nor is this necessary. But it is advisable for doctors and other health-serving agencies

to keep a written record of their work, including service contributions to society, in a businesslike manner.

**Better Professional Records.**—Every doctor and other health-serving agency owes it to patients, the cause, and to himself and to posterity, to keep a clear, properly indexed typewritten record of every service rendered to every person.

**Better Library Service.**—Well-arranged books, handy for reference, contributes to their use and, far more important, selected articles and abstracts from periodic literature must be kept readily available. No doctor who has anything else to do can read all the literature even within the field of his interests, but it is a simple matter to glance through all that is available, whether one magazine or a thousand, and check such messages as he feels he may need. These should be made easily accessible for future reference. Stocks of old unopened medical journals in the many doctors' offices are proverbial and they tell an interesting story to any intelligent and observing patient or visitor; often an expensive one to the doctor.

**Better Laboratory Service.**—Whatever a doctor's connection with established laboratories, certain equipment and certain routine and emergency work are essential in his office. The care of the equipment and much of the work may well be delegated.

**Better Literary Work.**—Most physicians have the praiseworthy desire to contribute things of value to the cause of health and they all have experiences valuable to the medical world if they are well told. Competent assistance would prove a stimulant to more and better literary effort.

**Better Correspondence.**—Doctors are notoriously negligent in their correspondence. Too many of them do not answer letters from their own organizations, even when the matter is of direct personal interest to the individual doctor. Next to the publication of worthwhile discussions on interesting medical topics, the most valuable ethical means open to a doctor of extending his influence is through intelligent promotion of his correspondence.

**Personal Protection.**—Anyone who examines newspaper clippings about doctors is forced to the conclusion that it is becoming increasingly hazardous to make a practice of being alone with patients.

For these and many other reasons that readily occur to the reader one or more competent personal assistants are valuable assets, if indeed not a necessity, for every physician. In hospitals and groups these assistants perform are grouped in specialized work of considerable variety, but all synchronized and amalgamated for the physician's use in serving the public.

The physician's assistant or secretary, whether serving the versatile requirements of a family physician's life or doing more limited work in hospital, laboratory or group, must be versatile in her accomplishments and well trained along several lines in addition to having the fundamental characteristics of loyalty, intelligence, industry and neatness. As physicians specialize, so do their assistants, but in both instances a primary experience in general practice is more than desirable and will constitute a life's work for the vast majority.

### "OVER THE HILLS TO THE POOR HOUSE"

The exposé of "Poor House" conditions, based on the recent study of the Federal Department of Labor, with some sixteen other organizations co-operating, has stunned people from one end of our country to the other, and well it might. Newspapers have featured the findings in news columns and editorials and review magazines have given much space to the high lights of the report.

The report is of the type which a few years ago would have been classed as muck-raking. Perhaps it is, but when there is nothing to rake but muck its stirring up may be the only method of securing improvement in an intolerable condition.

One of these days someone will study the situation and make a similar report about county hospitals, too many of which are but glorified—or unglorified—poor farms. In fact, so closely blended are these government agencies that it is difficult to understand how the hospitals escaped the investigator who made the recent report of a situation that smells to heaven.

Mr. Harry C. Evans, who did the investigating, thus sums up his charges against present poor-farm methods:

"1. The inhumane practice of setting up a special place or building and labeling it, to which the unfortunate, intelligent poor must go or starve.

"2. The poor-farms and their helpless inmates are a part of the political spoils of the community. The superintendent, manager, or overseer of the poor, is usually appointed because he is influential in politics, or because he will take the job for less pay than any one else, and not because of his special fitness for the work.

"3. The practice of sending hospital cases, the feeble-minded, the insane, the deaf and dumb, the blind, to poor-farms.

"4. The practice of sending paupers to convict camps.

"5. The practice of sentencing criminals to poor-farms.

"6. The practice of sending children to poor-farms.

"7. The lack of intelligent records showing cost of maintenance, value and disposition of crops, conditions of buildings, necessary additions, repairs and improvements, farm and building statistics, mental and physical conditions and case history of inmates.

"8. The maintenance of poor-farms that are dangerous fire-traps.

"9. The maintenance of poor-farms that are unsanitary and filthy.

"10. The gross neglect of inmates.

"11. The release of feeble-minded and contaminating, diseased inmates, and those having hereditary diseases, without record of their past or control of their future.

"12. The contract system under which the keep of paupers is let to the lowest bidder.

"13. The expensive practice of maintaining scores of poor-farms in a state when one would render more efficient, more economical, more scientific service."

In all this mess of depressing and even revolting

details many editors emphasize the tragedy of placing children in such environment.

"In 1922 more than 6000 children were admitted to the poor-farms of the United States—3094 boys and 3131 girls. In every ten years 60,000 children, according to Mr. Evans, are sent to poor-farms, where the contacts are in nearly all cases demoralizing:

"What these children need are homes, not institutions; doctors and nurses, not caretakers; personal attention, not attention en masse; the personal touch and care of men and women, rather than the mechanical authority of an institution or the state."

Many of these children need, in addition to homes, hospital facilities where doctors and nurses may serve effectively. Obviously, counties should provide these facilities or stand the cost of their purchase from those who have them to sell. It is to meet just this condition that the Federated Women's Clubs of California, under the leadership of their president, Dr. Mariana Bertola, are making the campaign for a children's department in every county hospital for the care of children who need care and whose parents are unable to purchase it "at the market."

This is child welfare at its best. It is well enough to complain that many of the defects and infirmities of children are preventable and to take steps calculated to make prevention effective at some future date, but in the meantime why not take care of the thousands of children who need expert medical care now in a hospital and who are unable to pay for it? Doctors and nurses realize the futility of much medical care given in clinics and even in doctors' offices, because enough hospital beds in worthy institutions are not available for the poor, particularly in less congested communities.

We are glad to see that a children's department in each of the thirty-odd county hospitals of California, with adequate facilities and personnel to serve the financially, physically and mentally crippled, is to be a major activity of the women's clubs for at least another year, truly a Herculean task, and it may be necessary to do some plain speaking before it is accomplished.

### WHO'S WHO IN THE M. O. R. C.

The first edition of the Directory of Medical Department Reserve Officers of the Ninth Corps Area, embracing California, Nevada, Utah, Washington, Oregon, Montana, Idaho, Wyoming, Alaska, has been issued by Colonel E. L. Munson, Corps Area Surgeon. The directory contains the names, addresses, rank, and detail of 1216 medical officers and 94 dental, veterinary, and other officers assigned to medical units. It shows the extent to which the movement has already developed, and its roster of names discloses the high class of men who have enrolled for patriotic service in any national emergency, and thus constitutes a Who's Who that reflects credit on the physicians of the west.

There are still several hundred vacancies in this service, which indicates that many doctors in active life have not availed themselves of the opportunity to align themselves with a patriotic public service which at the same time has far-reaching personal values.



## - The MONTH with the EDITOR -

Notes, reflections, comment upon medical and health news in both the scientific and public press, briefs of sorts from here, there and everywhere.

Doctors who have the interests of their profession at heart will find in Rexwald Brown's article on page 465 of this issue a clear exposition of a problem the correct solution of which is of primary importance to the future of our profession and to the welfare of society.

They say that in these states (Florida, North Carolina, Louisiana, and Texas) people who never before heard of evolution are inquiring into it, finding it interesting. Boys, denied the forbidden subject at school, furtively read about evolution from booklegged treatises, down behind the barn, where their fathers once read "Pluck and Luck," "Fred Fearnot," and "Diamond Dick," the while smoking cigarettes concocted of cornsilk.

To forbid is to recommend. These state legislatures are doing a great work for evolution.—Scientific American, September, 1926.

Letters of candidates for offices, which form a large part of a doctor's mail these days, make varied and sundry announcements and claims; some humorous, some pathetic, and some just plain Americana. A candidate for the office of coroner in one county includes this in his platform:

"Some people have the mistaken idea that the duties of coroner can be performed only by a doctor. This is not so. The coroner is not allowed by law to personally perform an autopsy, but must employ some doctor for that purpose. The coroner has nothing to do with the burial of the dead except to see that some undertaker does it. He has nothing to do with the determination of the cause of death except to call a coroner's jury for that purpose, and this jury from the testimony of other witnesses determines the cause of death. Where a knowledge of medicine is necessary a doctor is called as a witness. And the law does NOT require that a coroner shall be a doctor.

"I do not believe in unnecessary autopsies. If elected to the office of coroner I will respect the feelings of relatives in this regard, and only where the law or justice requires will an autopsy be performed."

Pre-;;:!?.—Pre, according to lexicographers, means "before." To prejudice, according to the same accepted authorities, is "to judge before full and sufficient examination."

Diagnosis, like other judgments, should be based on evidence and with all facts before us. What, Oh Lord, is preclinical diagnosis? Like a lot of other pre's, it is promoted to eulchre the physician out of some more of his responsibilities and patients and assign them to another class of "specialists" who are not governed by the laws of the land.

Pre, in its many ramifications, is something well worth thinking about. This perfectly good prefix has been promoted for selfish purposes until we now see huge signs about pre pre this, that and the other thing.

And some doctors fall for it!!

Picture, if you can, a country doctor in the year 1809 traveling sixty miles on horseback on a winter's day to see a patient whose strength was being sapped by the ravages of a pelvic tumor. The results of this visit are memorable alike for their far-reaching effect, as for the audacity of a surgeon and the courage of a woman. We next see this woman on a bleak day in December, 1809, "with her pendulous abdomen resting on the pommel of her saddle" riding those same sixty miles, a two or three days' journey, into Danville, Kentucky, there to submit

to the momentous experiment that was to supply the foundation for modern abdominal surgery. The central figures in these two pictures are Ephriam McDowell, the fearless surgeon, and Jane Todd Crawford, the heroic woman. Their story is indeed worthy of the pen of the novelist.—John B. Deaver, J. Iowa M. Soc., August, 1926.

Progressive medicine and the world has lost a great leader, and thousands of physicians a helpful friend, in the passing of John G. Adami on August 29, age 64. Doctor Adami at the time of his death was vice-chancellor of Liverpool University.

Our cities will secure clean milk instead of cleaned milk just as fast as they learn what the problem really is. Physicians and health officials working with far-sighted milk dealers can bring good milk to the attention of any city in short order. May the motto "Clean Milk, Not Cleaned Milk" guide more health departments in their future undertakings.—Illinois M. J., August, 1926.

The states should not be induced by coercion or by favor to surrender the management of their own affairs. The federal government ought to resist the tendency to be loaded up with duties which the states should perform. It does not follow that because something ought to be done the national government ought to do it.—President Coolidge.

One person out of every nineteen "gainfully employed" in this country draws his salary from public coffers.

There are between 2,500,000 and 3,000,000 persons on federal, state, and municipal payrolls.

Each American family contributes an average of \$123 a year from its income for the support of these jobholders.—Dearborn Independent, September 11, 1926.

Physicians interested in carbon monoxide poisoning will find an unusually complete review of the literature and some discussion of the subject in the Bulletin New York Academy of Medicine, August, 1926.

Some reader sends us the following clipping with the suggestion that doctors will enjoy it: A machine broke down. The operator, the foreman, and the plant engineer could not start it.

The expert took one quick look at the machine, tapped it several times with a hammer and told the operator to start it.

His bill was for \$250. When the superintendent asked for an itemized statement he got this:

Tapping with a hammer.....	\$ 1.00
Knowing where to tap.....	249.00
Total .....	\$250.00

"Radio Consultation," headlines over a story about some doctor being called from New York to London to "save the life" of a moving picture "magnate."

Some "consultants" are like that; they want to do all the talking and they want the world to hear them.

In spite of the fact that scientific medical bodies endorse vaccination to prevent smallpox, how many physicians advise their clientele to have the babies vaccinated when they are six months of age? Most of them wait

until the mother brings the child to the doctor stating that the school will not admit the child unless vaccinated. Furthermore, despite the fact that toxin-antitoxin is recognized as a preventive of diphtheria, how many physicians urge it in the families which they attend.—Health News, New York.

Facts about health are distributed to the public at large by the million. The dissemination of these facts is undoubtedly advantageous. Will an increased volume of health intelligence for the public at large ultimately enable the average individual thus exposed to make sound health judgments. Will we, by expanding our facilities in this quantitative way, ultimately furnish the basis for a practically universal sound value judgment as to what constitutes authentic information, and a reliable source of advice? Will something in addition have to be done to establish a confidence in scientific procedure, a reliance upon expert guidance, with the elimination of the existing popular antipathy to the expert in any field?—Boston M. and S. J., August 12, 1926.

In an address before the Royal Institute of Public Health, on the nature of malignancy, George Adami (Med. Jour. and Record, August 18, 1926), delivered one of his usual carefully prepared messages which should be seriously studied by every physician.

There is so much so-called scientific twaddle being fed to doctors and the public these days that it is only occasional clean-cut logical analyses like that of Chancellor Adami that keeps us safe from the position of John Byrom, whom the distinguished pathologist credits with: "Big fleas have little fleas upon their backs to bite 'em, And little fleas still lesser fleas, and so *ad infinitum*."

As may well be imagined, the work of this bureau (A. M. A., Bureau of Investigation) has met with bitter opposition. At one time suits for libel totaling almost thirteen million dollars were filed against the association for its courage in bringing to light the schemes of unprincipled promoters. Only one of these suits ever came to trial; the court damages amounted to but one cent, and the plaintiff paid his own costs. Even today two suits for one hundred thousand dollars each await action by the courts: one the case of a remedy promoted as a cure for cancer, the other a device issued with extravagant claims to persons who are deaf.—Morris Fishbein, The Century Magazine, August, 1926.

"The Chiro-Vox absolutely proves that there may be an apparent displacement without an impingement and that there may be a severe pressure that is doing untold harm, without any apparent displacement, even when such displacement cannot be detected either with the x-ray or by local palpitation."

This is one paragraph in the display advertising of a chiropractor in a metropolitan newspaper. The ad is headed "Listening in on Nerves," and the advertiser admits that it "may read like a fairy tale." It does.

I think the time has come when we ought to educate the people to consult well-trained men—and please get this statement right—I think the time has come when we ought to educate the people to consult well-trained men rather than to try to teach these people how to diagnose angina pectoris.—C. W. Waggoner, Ohio State M. J., September, 1926.

Newspapers round the world carried extracts from the Prince of Wales' postprandial address at the annual dinner of the British National Association for the Prevention of Tuberculosis held recently. An excellent message it was too, but the speaker had bad advice when he said that tuberculosis was a penalty of civilization and that it was hardly known among savage men and wild animals. This is not a fact, and the statement was the "news feature" of the address.

A valuable point was made in the epigrammatic state-

ment, "If (tuberculosis) preventable, why not prevented?" and again, "What has been introduced may be removed."

Such men (pioneers) fight the campaigns of the future over and over again in their thoughts while all the world around them is at peace; and when the time comes at last, though they themselves be gone, the roads they planned are broad and straight for the march of other feet; the sword they forged lies ready for another hand; the spirit they called up still lives, and they themselves, in their graves, in their well-earned rest, have a share in the victories which humanize mankind.—C. W. Waggoner, Ohio State M. J., September, 1926.

"Time," the attractive little news weekly with a big circulation, devotes three columns of its limited space (September 13) to lightly chiding physicians for their alleged timidity in helping the newspapers educate the public in medical matters, and in particular because they refuse to enter into newspaper debates with faddists and doctors with axes to grind.

"Time's" statement that "newspapers tend to print every scrap of medical information they can get" will make the initiated smile. Millions of words of medical information are published monthly in hundreds of legitimate magazines and reports. The American Medical Association publishes a popular health magazine and issues a clip sheet of interesting and attractive medical information to hundreds of newspapers, only a comparatively few of which pay any attention to this reliable information. Too many of them, and apparently "Time" also, consider a statement of Arbutnot Lane on a controversial subject medical information for the public, and they promote Lane further by eulogy and the publication of his picture.

"Time" also apparently considers as medical news the statement of Charles Mayo (given under what purports to be his picture) that Valentino died of septicemia. The bulletins issued by Valentino's physicians apparently were not news.

There is more of the same sort of "news" cleverly designed to discredit the conduct and by implication the motives of physicians because they refuse to enter newspaper controversies about health.

All the useful information any newspaper or "Time" wants may be obtained regularly if they will only ask the American Medical and other medical organizations.

Sir James Barrie, speaking the other day at a banquet for the Australian cricketers in England, spoke whimsically of one of those who, having set out upon the long journey of the dead, paused to lean his elbows on the village gate and watch the cricket match on the green. "What a terrible thing if he had to rejoin his fellows feeling that we, his successors, were not playing the game." Try as we will, we may not evade the responsibility we owe to those who have passed along this way ahead of us.—T. Wingate Todd, Science, September 3, 1926.

Thirty-one per cent of all hospital treatment in the United States in 1923 was given free and 19.3 per cent was only partly paid for.—Bull. of the Wayne County Med. Soc., September, 1926.

On account of changed standards of living in Germany, about 85 per cent of the sick take advantage of their privileges as members of city and state clinics, for their services in which doctors are paid either a low salary or a minimum fee amounting to about 20 cents per patient.

The increase in the number of doctors is accounted for by the advantages offered during the war to those wishing to take a course of instruction. Doctors are collected thickest in Berlin, where there is one for each hundred persons.—New York Times.

There is almost daily evidence that physical therapy is rapidly "living down its past" reputation and finding its place among the reputable therapeutic measures.—Internat. Med. Digest, August, 1926.

## MEDICAL ECONOMICS AND PUBLIC HEALTH

Physicians have invariably waited for the other fellow to organize them into active, potential forces, as far as the economic side of medicine is concerned. That condition occurred in Germany, and it happened in England, which heterogeneously scrambled medical sociology and the insurance business, with its lay control of medical practice; and the same invasion now threatens the integrity of the American medical profession.—*Ther. Gaz.*, August, 1926.

When a child is not feeling well no one will know this condition sooner than the parents. This should be sufficient reason for seeing the family physician.

Those who must be "baited with an opportunity for free services" seldom receive the full significance of "free service." The very fact they waited for a free clinic indicates that they have knowledge of the need for medical services.

It is far better that these people receive information about the fallacies and hazards of unqualified practitioners and the "cure-alls" than it is to hand them free services in a spectacular publicity campaign.—*Ohio State M. J.*, September, 1926.

Three years ago the women physicians of the San Diego County Medical Society who were in charge of health committees of various women's organizations called a special meeting to discuss plans for better co-ordination of the health work of all clubs. After consultation with the council of the medical society, the president of the dental society, the public health nurses, and the president of the most active women's clubs, the medical women decided to carry out a yearly program of baby health conferences under the auspices of a few of the clubs, but with the co-operation of all others interested. To this end there was formed a central group known as the San Diego County Public Health Committee with a membership limited to the presidents of the organizations interested in health work and the chairman of their public health or welfare committees.

The following lay groups were represented: County Federation of Women's Clubs, District Parent-Teachers' Association, City Parent-Teachers' Association, Catholic Charities, Chamber of Commerce, Red Cross, Farm Bureau, Education (through the County Superintendent of Schools, Civic Center, Associated Charities, etc.).

Representing organized medicine were the San Diego County Medical Society, San Diego County Dental Society, City Board of Health, County Physician, San Diego County Nurses' Association, and the San Diego County Public Nurses' Association.

Meetings were held monthly at which all work done during the past month was reported and plans for the next month presented and discussed. Every health question touching San Diego County was considered at these meetings, and the decisions reported back to the members of all the organizations in the county by their representatives on the committee.

The successful work carried forward by this organization makes it evident that women physicians, with the power of the organized minority behind them, and through their positions as chairmen of public health and child welfare committees in the women's organizations, rightly using their influence, can become a strong connecting link between organized medicine and organized women, and a powerful factor in public health education and public health legislation.

Dr. Martha Welpton, who is an active leader in this work, says that "over 50 per cent of organized women's groups are doing public health work, and are depending on the doctors of medicine to give the service. We are giving it to thousands, but as individuals, not as representatives of a regular group of scientific persons. I believe the fault is our own; and I also believe we can overcome it. The clubs are all open to us; they are will-

ing to co-operate and, in fact, have been co-operating for years."

To get rid of the cults it is for us to educate the people of the United States medically; but to get rid of the free clinics for the rich and poor we have to educate ourselves. Let every physician refuse to attend any out-patient department that is competing and taking away the very bread and butter of his fellow-practitioner.

The carpenter and painter are always fighting honorably for their bread and butter, but the physician, who works seven days per week and twenty-four hours a day getting paid at times, thinks it is below his dignity to fight for his interest. Thousands of my fellow-physicians will agree with me that it is absolutely wrong for any institution to give medical aid to those that can afford to pay a doctor. At every clinic of this city we find men and women of considerable wealth looking for charity. To meet real estate men or bootleggers at the out-patient department is a very common thing.

For the sake of the real poor patients who deserve charity, for the sake of our fellow-practitioners who deserve an honest, decent living, I urge the Massachusetts Medical Society to follow the action and resolutions recently passed by the Missouri Medical Society: "That every patient will have to produce a statement from two reputable citizens that the patient applying for treatment is not able to pay for such treatment."

Charity to the poor, but justice to all.—William Frankman, Boston M. and S. J., August, 1926.

We are having a taste of what our own state can do in the way of treading upon the toes of the private practitioner of medicine through the gratuitous service that is rendered by the Indiana State Board of Health in direct competition with laboratories and private practitioners of medicine. In reality there is ample evidence to prove that some sanitariums and private practitioners of medicine are taking advantage of the free service of the state by charging their patients for it. This places the burden of responsibility for the growth of state medicine upon the medical profession as well as upon the public health officials, and it is time for an accounting. We have no objection to the services rendered by the state for the indigent, but we do object to the state putting itself in competition with the private practitioners of medicine by taking pay patients from the latter, to say nothing of helping to pauperize and make dependent those who should be self-respecting and self-supporting.—J. Indiana M. A.

The liberality with which the Workmen's Compensation Act is interpreted by the Industrial Accident Commission and the Appellate Courts of California. In the case of *Rader vs. The County of Monterey*, decided by the Supreme Court of California last week, the court affirmed the Industrial Accident Commission's award of a death benefit of \$4900 to Nellie Pearl Rader, the minor daughter of R. N. Rader, a citizen of Salinas, who was killed by rum-runners at Moss Landing on the night of July 6, 1925. The decision is important in that it assures proper compensation to the dependents of men who lose their lives by reason of being impressed into service by peace officers in their work of crime suppression.

The decline in the birth rate which has taken place during the past quarter of a century throughout the civilized world is especially prominent in the United States. As to the factors causing this decline in birth rate there is hardly any question that the restriction of immigrants during the very recent years, the dodging of parental responsibilities, the seeking of personal comfort and the propaganda on birth control have all been responsible in part.

The distinction of having the highest birth rate was earned by Detroit with a rate of 25.79 per 100,000 of the population. San Francisco had the lowest rate of 12.75, and as a low infant mortality rate goes hand in hand with a low birth rate, it is not surprising that it made the best showing of all the cities as to infant mortality. Los Angeles was the next lowest of 15.55. The rate in



New York City was 20.60.—Bull. City of New York Department of Health.

At last, at last! More and more do we find medical men awakening to the fact that the profession is face to face with efforts on the part of industrial and commercial organizations to take over the practice of medicine, and destroy the personal relation of doctor and patient, upon which the safety of both depends. Some of the eastern medical societies, through their bulletins, are advocating a complete reorganization of the medical profession with the idea of making better doctors of those already in practice, and uniting them more thoroughly with any plan for economic protection. Let the good work go on.—J. Indiana M. A., August, 1926.

The gentleman in charge of rehabilitation work in a certain section said, "Do you know that I have gotten all the doctors of the state to agree to take care of all these cases, do all the rehabilitation work free of charge." And he was asked, "What is your salary?" He said, "I am getting \$6000 a year." He was asked, "Are the nurses paid?" "Yes." "Are the buildings where you are doing this work paid for?" "Yes." "Everybody is paid, but the doctors of North Carolina are not being paid.—C. W. Waggoner, Ohio State M. J., September, 1926.

The fact that there has been no significant improvement in maternal mortality rates during the first six months of 1926 should provoke inquiry. What could have been expected of the maternity work which was instituted with such fervor and zeal ten years ago? Was it founded upon sound principles, were its aims realizable, and was there a program sufficiently comprehensive to affect the vast number of maternity cases which occur annually in the area under survey? Or, have new factors intervened to offset the work of boards of health and of private agencies? Has the increased proportion of hospitalized cases been accompanied by more septic complications? Whatever be the answers to these and other questions which arise, it is clear that over the past decade little if any impression seems to have been made upon the risk of death in child-bearing.—Statistical Bulletin, Metropolitan Life Insurance Company.

The University of Wisconsin, one of the foremost educational institutions of this country, is teaching its students what it is to have communal medicine, and what a great and wonderful thing it would be if a county or a state could pass a law—and this institution has eight or ten thousand students—whereby the patient could be treated for a cost of from fifty cents to a dollar a year. And that propaganda is going out over the country not only from that institution, but many others in which they are being taught what a wonderful thing it would be.—C. W. Waggoner, Ohio State M. J., September, 1926.

Up to the close of 1916 only fourteen full-time county health units were functioning in the United States. At the close of 1925 there were 299 full-time county health units in operation in thirty-three states, and 80 per cent of these had been established in the preceding six years.—Rockefeller Foundation, 1925 Annual Report, International Health Board.

In North Carolina, Alabama, and Ohio over 50 per cent of the total population is served by full-time county health units.—Rockefeller Foundation, International Health Board.

**Our Maternal and Paternal Government**—If the conscientious mother would prepare her child's school luncheon with the help of the Federal Government, she may get that help from either the Treasury Department, the Department of Agriculture, or the Department of the Interior.

The first named, through its Public Health Service, will furnish her with "Nutrition and Education."

The second, through its Bureau of Home Economics, will respond with "School Lunches."

The third, through its Bureau of Education, will send "Diet for the School Child."

Does the subject of milk for the growing child concern her, she may ask for:

"Milk, the Indispensable Food for Children," from the Children's Bureau of the Department of Labor.

"Milk and Our School Children," from the Bureau of Education of the Department of the Interior.

"Safe Milk, an Important Food Problem," from the Public Health Service of the Treasury Department.

"Milk and Its Uses in the Home," from the Bureau of Home Economics, of the Department of Agriculture.

Or would you learn to protect yourself from deadly carbon monoxide gas in garages, you can turn to the Public Health Service, the Bureau of Mines or the Bureau of Labor Statistics, and each will gladly send you a bulletin.

Some six government bureaus deal with tuberculosis prevention; three departments and an independent board are working on rural hygiene; four departments and some independent bureaus have an eye on sanitary engineering.

We round up these facts from "National Government and Public Health," written by James A. Tobey and published by the Institute for Government Health. Mr. Tobey's 400 pages are largely an argument for a central division or department of public health. To us they were more interesting for their striking instances of how government activities multiply and duplicate.—Editorial, Nation's Business, September, 1926.

A pension system is exactly the same thing, mathematically, as a depreciation account for a piece of machinery. No sensible business man trusts to luck to be able to retire a worn-out machine and buy a new one out of current earnings. He sets up a reserve for depreciation the moment he installs the machine. For exactly the same reason, he should set up a reserve for future pension the moment he employs a new workman.

The mathematics of the whole subject has been worked out by the larger life insurance companies, and information can be had from them upon request. Certainly no employer who has in effect or is contemplating an industrial pension system can afford not to know these mathematics. He can then, with confidence in the future, join the far-sighted movement which will probably head off the wasteful government-operated compulsory industrial pension systems now in effect in Europe and in some South American countries, gaining for himself the very practical benefits of a co-operation with his men that is self-respecting on both sides, and extremely valuable as a builder of efficiency and goodwill.—World's Work, September, 1926.

With the increase of organized charity there has followed an enormous increase in the pauper class. The mendacious who depend upon charity for the whole or a part of their needs find the present system of easy benevolence fruit ripe for their picking. Free clinics and other gratuities relating to sickness, added to ubiquitous health service, curtails to a tremendous degree the usefulness of the so-called family physician and makes a new aristocracy of pauper invalids.—Ohio State M. J., September, 1926.

The practice of medicine has gone along all through these centuries, every doctor a health officer and the highest aim of every doctor the prevention of disease. And as the application for the treatment of disease became more intricate and more complex, he saw that it was necessary to designate a part of his profession to that particular side of medicine—preventive. Whenever you try to destroy the standard which every doctor has tried to establish, you are raising a menace to the profession.—C. W. Waggoner, Ohio State M. J., September, 1926.

The doctors of Ohio are the health officers of Ohio, and only to the Ohio State Medical Association may you look with safety for proper instruction and proper en-

lightenment. And when you leave the Ohio State Medical Association for authority or advice, and when you neglect or ignore its suggestions and its welfare you are treading upon ground that is not safe, and you are throwing the people of the country into the greatest danger.—C. W. Waggoner, Ohio State M. J., September, 1926.

An instance of the gullibility of doctors is contained in the following report made by The Doctors Business Bureau to the C. M. A. recently. Names are omitted:

"At the request of Dr. — of Pomona, California, a member of your association, we have just made a preliminary investigation of the affairs of the —, and have obtained the following rather startling and almost unbelievable facts:

"Approximately 3000 doctors have been swindled outright of a sum believed to be in excess of \$100,000 within the past eighteen months. We learn that this concern was organized in March, 1925, by —, with headquarters in San Francisco. Solicitors were put in the field throughout the Pacific Coast states to obtain accounts for collection, almost the entire selling campaign being directed to doctors. The company purported to have a large amount of capital and represented to prospective clients that it would pay them outright 25 per cent of the entire list of accounts submitted as soon as the same could be verified, and furthermore would finance the debtors, enabling them to pay their accounts in full so that the client would obtain his money immediately.

"About July 1, we are informed, — absconded with the company's funds, approximately \$60,000, and the concern is now wholly insolvent. Only four or five clients ever received any money at all during this entire time, and these only because they threatened prosecution. Other clients were stalled off with notes and promises. The evidence seems to be quite conclusive that the intention from the very first was to defraud, as the company's first attempt to make collection was an offer to the debtor to accept 75 per cent of his account in full payment. Later all debtors were offered a 50 per cent settlement, and finally the company offered to sell each debtor his account at his own price. Up to the present time, we understand, no steps have been taken to apprehend —, who was last heard of in Canada.

"On account of the great number of doctors involved in this gross swindle, we are making this report to you for your information and for such use as you may care to make of it for the benefit of your members.

Very truly yours,

THE DOCTORS BUSINESS BUREAU  
J. A. Slaughter, Manager."

In London Sir William Arbuthnot Lane, surgeon, authority on intestinal disorders, found his photograph printed on 40,000 menus of Lyons restaurants. The printing was done without his knowledge. He needs no such publicity. Nor does such publicity injure his reputation, nor curtail his skill. None the less, the British Medical Association denounced him, even though he had resigned from it a year ago because of professional criticism of his disease prevention work.—*Time*, September 13, 1926.

For a time after a physician "resigns" from his medical association because of "professional criticism" his name may be valuable to newspapers, on menu cards, and as an endorser of this or that method or remedy, but the time of such public popularity usually is short-lived and ends in oblivion.

The recent advances in medical science require more schooling and capacity from the medical man than ever before. But if we make medical education too expensive we will defeat our purpose in more ways than one. Every highly trained medical man is an asset to the commonwealth, and the commonwealth can afford to see to it that the right kind of man should not be excluded on account of expense. Ours is a poor man's profession, but there is an inherent element of caste in our profession inasmuch as the family has always cheerfully given its most gifted son to recruit our ranks; and should we turn our face toward caste and superiority?—"An Old Country Doctor," in the *Journal-Lancet*, August, 1926.

## CALIFORNIA MEDICAL ASSOCIATION

W. T. McARTHUR, M. D. .... President  
PERCY T. PHILLIPS, M. D. .... President-Elect  
ROBERT V. DAY ..... Vice-President  
EMMA W. POPE, M. D., San Francisco ..... Secretary and Associate Editor for California

### ALAMEDA COUNTY

Alameda County Medical Association (reported by Pauline S. Nusbaumer, secretary)—The first regular monthly meeting of the Association after the July vacation was held August 16, 1926.

Sumner Everingham presented an interesting patient with an esophageal diverticulum.

H. J. Templeton spoke on "Dermatologic Manifestations of Syphilis," and illustrated his remarks by lantern slides of the more common syphiloderms. He emphasized the point that all physicians should be familiar with such lesions, inasmuch as syphilis is apt to crop up in any field of medicine. He also stressed the necessity of careful examination of all genital lesions by means of the dark-field examination, for many lesions which appear to be rather benign, in reality harbor the spirocheta pallida.

The talk on experimental erysipelas by Harold Amoss was interesting and instructive. Doctor Amoss addressed the Association by invitation.

S. H. Buteau read a tribute to the late James Hamilton Todd. Adjournment was taken out of respect to Doctor Todd.

### MARIN COUNTY

Marin County Medical Society (reported by J. H. Kuser, secretary)—The regular monthly meeting was called to order at 8 p. m., August 26. The following members were present: O. W. Jones, W. F. Jones, F. Cannon, J. H. Kuser.

The minutes of the last meeting were read as approved. The secretary then read some notes made at the Health Officers' Meeting at Yosemite which were of interest to the medical profession. It was moved by Kuser that the Hon. Charles Reindollar, member of the Assembly from Marin County, be invited to address the medical society at their next meeting on September 23 on legislation affecting the medical profession. This motion was carried.

### ORANGE COUNTY

Orange County Medical Society (reported by D. R. Ball, secretary)—At the regular monthly meeting of the Orange County Medical Association, September 7, 1926, the following resolutions were passed:

Whereas, During the last year the California Medical Association has lost by death three of its oldest and most active members, namely, Drs. Thomas Clay Edwards of Salinas, James H. Parkinson of Sacramento, and Saxton Temple Pope of San Francisco; and

Whereas, These members were known in person or by reputation by all of us and had our greatest respect and love, therefore be it

Resolved, That the Orange County Medical Association in common with the California Medical Association feels most deeply the loss of these members and extends its heartfelt sympathy to their bereaved families; and further be it

Resolved, That copies of these resolutions be sent to the secretary of the California Medical Association and to the families of the deceased members.

### SACRAMENTO COUNTY

Sacramento Society for Medical Improvement (reported by Bert S. Thomas, secretary)—In lieu of our August meeting, our society has been gathering from summer jaunts.

George W. Dufficy imbibed freely of the fog in the Monterey and Del Monte region, and is now back where he can show his pleasant smile in the sun.

A convention of ophthalmologists in Colorado took Wallace R. Briggs to that region.

Frank B. Reardon is still spending a portion of his two months' outing through the East. One feature of his

trip includes instruction in neuropsychiatry. A course will be taken in New York.

Those friends of Frederic Scatena who well remember his extended waistline will be surprised to hear that his weekly fling as a baseball pitcher and his daily dip in the local Elks' tank have about let him reach his life's ambition—to take off forty pounds.

Manuel Azevedo tells us that the rains of the Northwest are as severe as ever.

It is with real pleasure that we welcome William Miller to Sacramento again. Doctor Miller has remained in the North for some time regaining his health.

We now have more room in Sacramento for bachelor physicians, for we are losing James A. Warburton and C. E. von Geldern to the benedicts.

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### SAN DIEGO COUNTY

**San Diego County Medical Society** (reported by Robert Pollock)—The fall activities of the medical society are looming up in the foreground after the summer recess. On the evening of August 27 the staff of Mercy Hospital was entertained by an excellent talk by C. P. L. Mathé, M.D., of San Francisco, who gave his impressions of urology as he saw it on a recent tour of the European clinics. He also outlined the up-to-date procedures in diagnosis and treatment of pathologic conditions in this domain, ending by a rapid-fire introduction to a large group of well-prepared radiographs of conditions of the kidney, ureters, and bladder. His paper was briefly discussed by Lee, Chamberlain, Foote, and Molitor.

On Tuesday, September 7, the staff of Scripps Memorial Hospital convened to discuss routine business and analyze some of the hospital records of the month that presented more than usual interest.

Ground has been broken at the corner of Third and A streets for a fourteen-story building devoted exclusively to doctors of medicine and dentistry and providing for a top floor auditorium to accommodate 250 seats. This will probably be ready for occupancy by June, 1927.

The County Supervisors are mapping out extensive improvements at the County Hospital. Two of the new buildings are nearing completion, a detailed account of which will appear in our next letter.

These are among the attractions ahead: for the regular October dinner the Society presents Dr. Frank Hinman of San Francisco, while in November the Scripps Metabolic Clinic presents Dr. Elliott P. Joslin of Boston.

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### SAN JOAQUIN COUNTY

**San Joaquin County Medical Society** (reported by Fred J. Conzelmann, secretary)—The stated meeting of the San Joaquin County Medical Society was held Thursday, September 2, 1926, at 8 p. m. at headquarters of the local Health Center, 129 South American Street.

The meeting was called to order by the secretary. In the absence of the president and vice-president, J. V. Craviotto was chosen temporary chairman. Thirty-three members were in attendance. Those present were S. R. Arthur, E. L. Blackmun, J. F. Blinn, H. J. Bolinger, C. A. Broadus, F. J. Conzelmann, J. V. Craviotto, J. T. Davison, J. F. Doughty, C. F. English, William Friedberger, Minerva Goodman, E. C. Griner, R. R. Hammond, C. D. Holliger, G. H. LaBerge, Grace McCoskey, R. T. McGurk, W. T. McNeil, F. G. Maggs, F. S. Marnell, J. E. Nelson, F. J. O'Donnell, Dewey R. Powell, D. F. Ray, G. H. Rohrbacher, G. H. Sanderson, J. J. Sippy, J. A. Smither, Margaret H. Smyth, C. V. Thompson, A. L. Van Meter, G. J. Vischi.

Drs. A. J. Chesley, State Health Officer of Minnesota, and Charles H. Halliday of the division of epidemiology of the California State Health Department as guests of the Society; also Doctors Sheldon, Biethan, and Sinai as visitors.

The minutes of the previous meeting, May meeting, and of the special meeting of June 14, 1926 were read and approved.

The applications of Winifred Biethan and H. L. Gregory were read and referred to the committee on admission.

A communication from the secretary of the American Medical Association relative to the report of the Com-

mittee on Medical Relief in Disaster was read, and also the report of the committee.

Doctors Halliday and Chesley gave interesting discussions relative to the necessity of the profession being organized under a directing head to take charge of situations in case of disaster. All the members present voiced their approval of the plan.

Doctor Van Meter moved, seconded by Dr. Dewey Powell, that the Chair be authorized to appoint a committee of five to study the report of the A. M. A. committee with the view to get the organization to function immediately as outlined in the report. The motion carried. The Chair named Drs. Dewey R. Powell, Rohrbacher, Van Meter, Griner, and Maggs to constitute this committee.

The request of Mrs. W. B. Sampson, chairman of the Disaster Relief Committee of the local Red Cross Chapter, that the Medical Relief Committee of this society act as Advisory Committee for the Red Cross Chapter was granted.

The Chair appointed a committee consisting of Doctors Chapman, McGurk, and Powell to draw up suitable resolutions in behalf of the Society to be sent to Doctor Lynch as an expression of our sympathy in his great sorrow in the passing of his wife.

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### SANTA BARBARA COUNTY

**Santa Barbara County Medical Society** (reported by Alex C. Soper, Jr., secretary)—The regular September meeting of the Society was held at the Cottage Hospital Monday evening, September 13. Present, twenty-three members and four guests. President Henderson took the chair. The minutes of the preceding meeting were read, approved and ordered filed.

John B. Manning read a paper on "Anterior Poliomyelitis," which was discussed by Lamb, Schurmeier, Van Paing, and Koefod. Hugh Freidell reported an interesting case of Hodgkin's disease in which the pathology was confined to the abdominal region, the diagnosis appearing at autopsy. This was discussed by Koefod and Pierce. William H. Eaton presented a scheme for co-ordination of health agencies for the city, modeled on the very successful one used at Berkeley. This was discussed by Doctors Means, Bakewell, and Markthaler, and it seemed of such importance that the president appointed a committee to investigate and report its possibilities, consisting of Rexwald Brown (chairman), Eaton, Means, Manning, and Freidell; this was by authority of a motion duly seconded and passed.

Notice was taken of the death on September 5 of our eldest member, William H. Flint, and a committee appointed to draw up resolutions to be sent to his daughter.

Mr. George Coleman, bacteriologist, and head of the local chapter of the Association for Medical Progress, sent in a notice of the beginning of a campaign to put before the laity the facts of diphtheria prevention by newspaper publicity and a contest for prize essays on the subject by laymen.

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### SISKIYOU COUNTY

**Siskiyou County Medical Society** (reported by S. S. Kalman)—Siskiyou County Medical Society met in Etna, September 5. Among those present were Doctors Haines, Heaney, Kalman, and Pius. In the absence of Doctor Dickenson, who was scheduled to read a paper, the members spent the time by enjoying social intercourse. Following the meeting, the doctors were adjourned for dinner as the guests of Doctor Haines, joined by Mrs. Haines and Mrs. Pius.

The next meeting will take place in Yreka on the first Sunday in November.

### CHANGES IN MEMBERSHIP

**New Members**—Fred W. Hodgins, Jessie B. Farrior, Henry E. Stafford, Oakland; Edward Liston, Eugene H. Reid, Lucile Elliott, Berkeley; Ford P. Cady, Willis Dutcher, Samuel J. Glass, John E. Kirkpatrick, Arthur M. Leavitt, Rudolph E. Monaco, F. T. Nayaka, T. H. Niemann, Catherine Ohnemuller, R. W. Stellar, Louis A. Eshman, Nikander M. Ribuchin (Orange County member), Los Angeles; William C. Cunningham, Leo John



Madsen, Santa Monica; Kathryn G. Wells, Montebello; George A. Bendlage, Long Beach; William W. Belford, George M. Selby, Ernest B. Porter, San Diego; Dohrmann K. Pischel, Julian Cohn, D. H. Craig, C. Frederic Fluhmann, San Francisco; John E. Miller, San Luis Obispo; W. H. Zieber, Menlo Park; Thornton M. Shorkley, Santa Barbara; Ward Cooper, Palo Alto; Donald E. Davenport, H. William Milo, Mountain View; Charles P. Durney, Harry J. Hoag, Rieta Hough, K. F. Pelkan, San Jose; Gustav A. Mauser, Los Gatos.

**Resigned**—William Day Moore, Los Angeles County; E. Blanche Ramer, San Diego County.

**Transferred**—H. J. Beaver, Santa Cruz County to Santa Clara County.

Arthur Fibush, Alameda County to San Francisco County.

George W. Garner, Los Angeles County to Kern County.

Robert A. Powers, San Mateo County to Santa Clara County.

**Deaths**—Angermann, Ewald Herman. Died at San Francisco, September 18, 1926, age 38. Graduate of the College of Physicians and Surgeons, San Francisco, 1917. Licensed in California in 1918. Doctor Angermann was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

**Flint, William H.** Died at Santa Barbara, September 5, 1926, age 74. Graduate of Bellevue Hospital Medical College, New York, 1877. Licensed in California in 1896. Doctor Flint was a member of the Santa Barbara County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

**Winship, William Algernon.** Died at San Diego, September 3, 1926, age 66. Graduate of the Royal College of Physicians and Surgeons, London, England, 1885. Licensed in California in 1907. Doctor Winship was a member of the San Diego County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

### EXTENSION LECTURE SERVICE

In the September issue of CALIFORNIA AND WESTERN MEDICINE members were invited to join the Extension Lecture Service and submit titles of papers they are prepared to present before county societies. The following completed program will be furnished all county secretaries as a reprint on November 1. Further names and titles will be included if sent this office prior to October 20:

**Harry E. Alderson, M. D.**, 320 Medico-Dental Building, 490 Post Street, San Francisco.

1. A Skin and Syphilis Clinic will be Held of Locally Selected Cases (five or six).
2. Newer Methods of Therapy in Dermatology.
3. Therapy of Syphilis.
4. Skin Disturbances from Foods and Drugs. (Lantern Slides.)

**Hans Barkan, M. D.**, 921 Medico-Dental Building, 490 Post Street, San Francisco.

1. Headaches Due to Ocular Causes.
2. Industrial Aspects of Eye Injuries.
3. Modern Methods of Cataract Operations.

**Edwin I. Bartlett, M. D.**, 1020 Medico-Dental Building, 490 Post Street, San Francisco.

1. The Use of the Exploratory Incision in the Diagnosis of Malignant Disease.
2. When and How to Operate on the Breast.
3. Simplified Classification of Breast Conditions, and "Short-Cuts" to Diagnosis.
4. Essential Points in Neck Dissections and Methods of Accomplishment.

**Leo P. Bell, M. D.**, Woodland Clinic, Woodland.

1. Diseases of the Spleen and Their Treatment.
2. Preoperative Preparation and Surgical Treatment of Exophthalmic and Thyrotoxic Goiter.
3. Diagnosis and Surgical Treatment of Carcinoma of Rectum and Sigmoid.
4. Preoperative Preparation and Surgical Treatment of Carcinoma of the Pancreas with Obstructive Jaundice.
5. Carcinoma of the Large Bowel, Its Surgical Treatment.
6. Imperforate Anus, Its Surgical Treatment.
7. Congenital Goiter.
8. The Surgical and Medical Significance of Dyspepsia.

**W. W. Boardman, M. D.**, 612 Union Square Building, 350 Post Street, San Francisco.

1. Treatment of Cholecystitis.

2. Cholecystography—Its Value as a Diagnostic Procedure in Infectious Gall Bladder Disease.
3. Some of the Newer Methods of Studying Liver and Gall Bladder Disease—Vandenberg's Test—Icterus Index—Phenoltetrachlorophthalein.
4. Present Conceptions of Jaundice.

**Zera E. Bolin, M. D.**, St Luke's Hospital, San Francisco.

1. The Uses of Blood Chemistry in Diagnosis. (Lantern Slides.)
2. The General Practitioner and the Carrier Problem.
3. Gaucher's Disease and Splenic Anemia.
4. The Pathology of Addison's Disease. (Lantern Slides.)
5. The Need for Medico-Legal Instruction.
6. The Antiquity of Disease. (Lantern Slides.)
7. Necropsies and Their Clinical Value.
8. The Teaching of Medical History in Medical Colleges.
9. The History of Military Medicine.
10. Hereditary Metabolic Disease.
11. Medicine and Colloid Chemistry. (Lantern Slides.)

**Philip King Brown, M. D.**, 401 Medical Building, 909 Hyde Street, San Francisco.

1. The Medical and Surgical Treatment of Peptic Ulcer.
2. The Medical and Surgical Treatment of Angina. (With Walter B. Coffey, M. D., San Francisco.)
3. Leukemia and Its Treatment, with Special Reference to X-Ray.
4. Pneumothorax, Phrenocotomy and Thoracoplasty in the Treatment of Pulmonary Tuberculosis. (With Leo Eloesser, M. D., San Francisco.)
5. Chronic Gall Bladders.
6. Management of Acute and Chronic Heart Disease.
7. Heart Irregularities and Their Treatment.
8. Measurements of Kidney Function and Prognosis and Treatment of Nephritis.

**Joseph Catton, M. D.**, 609 Howard Building, 209 Post Street, San Francisco.

1. The Doctor Looks at Crime.
2. Mental Problems in Every-Day Practice.
3. Some Practical Considerations of the Vegetated Nervous System.
4. What the General Practitioner Should Know of Encephalitis.

**E. W. Cleary, M. D.**, 803 Liebes Building, 177 Post Street, San Francisco.

1. Fractures of the Spine. (Lantern Slides.)
2. Fractures of the Long Bones. (Lantern Slides.)

**J. Paul de River, M. D.**, 361 Sutter Street, San Francisco.

1. Correction of External Nasal Deformities. (Lantern Slides.)
2. Correction of Deformities of Nose and About the Orbit. (Lantern Slides.)
3. The Present-Day Advance in Plastic Surgery. (Lantern Slides.)
4. Featural Plastics by the Tubed Pedicle Flap Method. (Lantern Slides.)

**Ernest S. du Bray, M. D.**, 1251 Flood Building, 870 Market Street, San Francisco.

1. Some Important Phases of the Diabetic Problem, with Special Reference to Early Diagnosis and the Differentiation of Certain Nonpancreatic Glycosurias.
2. The Management of Diabetes Mellitus, with Special Reference to the Planning of the Quantitative Diet and the Adjustment of Insulin Dosage.
3. Obesity and the Dangers of Weight Reduction Without Proper Medical Supervision.
4. A Review of Our Knowledge of the So-called Lipoid Nephrosis and Its Significance as a Clinical Entity.
5. Comments on the Degenerative Diseases, Their Prevalence, Significance, and Modes of Prevention.

**L. A. Emge, M. D.**, 507 Union Square Building, 350 Post Street, San Francisco.

1. Sterility.
2. The Transsufflation of Uterine Tubes.
3. What Can the Clinician Learn from Cancer Research?
4. The Lacerated Cervix.
5. The Menopause.
6. Varicose Veins of the Female Pelvis.

**Ernest H. Falconer, M. D.**, 316 Fitzhugh Building, 384 Post Street, San Francisco.

1. The Diagnosis of Pernicious Anemia. (Lantern Slides.)
2. The Treatment of Severe Anemias. (Lantern Slides.)
3. The Classification and Diagnosis of the Hemorrhagic Diseases. (Lantern Slides.)
4. The Spleen and Its Relationship to Diseases of the Blood-Forming Organs. (Lantern Slides.)

**Fred R. Fairchild, M. D.**, Woodland Clinic, Woodland.

1. Why Group Practice.
2. Practical Talk on Fractures. (Lantern Slides.)
3. Differential Diagnosis of Upper Abdominal Conditions.

**Ernst Gehrels, M. D.**, 308 Medical Building, 909 Hyde Street, San Francisco.

1. Local Anesthesia for Abdominal Operations, Especially Splanchnic Anesthesia.
2. The Radical Surgical Treatment of Gastric and Duodenal Ulcer.
3. The Treatment of Gall Stones in the Common Duct.
4. Operative Mobilization of Ankylosed Joints, Especially the Knee Joint.

**Arthur C. Gibson, M. D.**, 416 Physicians Building, 516 Sutter Street, San Francisco.

1. Pan-Sinusitis, with Suggestions for Rational Therapy. (Lantern Slides.)
2. Chronic Catarrhal Otitis Media, with Discussion of

- Causes, Treatment and Results. (Lantern Slides.)
3. Causes of Chronic Otitis Media, with Discussion of Treatment and Results. (Lantern Slides.)
  4. The Mastoid—Its Complication, Diagnosis, Treatment, with Results. (Lantern Slides.)
  5. Combined Intranasal and External Tear Sac Operations with Results (Totimosher Method). (Lantern Slides.)
- Thomas E. Gibson, M. D.**, 742 Flood Building, 870 Market Street, San Francisco.
1. The Diagnosis of Adrenal Tumors. (Lantern Slides.)
  2. Diagnosis and Treatment of Rupture of the Urethra. (Lantern Slides.)
  3. The Etiology of Hydronephrosis. (Lantern Slides.)
  4. Diagnosis and Treatment of Testicular Tumors. (Lantern Slides.)
- Edgar L. Gilcreest, M. D.**, 315 Fitzhugh Building, 384 Post Street, San Francisco.
1. Personal Reminiscences of Sir William Osler, Physician and Philanthropist. (Lantern Slides.)
  2. A Consideration of Rupture of Muscles and Tendons. (Lantern Slides.)
  3. Fractures of the Elbow Joint and the Lower End of the Humerus. (Lantern Slides.)
  4. Fractures of the Ankle Joint and the Lower End of the Tibia. (Lantern Slides.)
  5. Fractures of the Wrist Joint and the Lower End of the Radius. (Lantern Slides.)
- A. Gottlieb, M. D.**, 605 Consolidated Realty Building, 607 South Hill Street, Los Angeles.
1. Tailpes.
  2. Sun Treatment in Orthopedic Conditions.
  3. Osteochondritis. (Lantern Slides.)
  4. The Painful Foot. (Lantern Slides.)
  5. Physiotherapy in Poliomyelitis Deformities.
  6. General Classification of Skeletal Deformities.
- J. Edward Harbison, M. D.**, Woodland Clinic, Woodland.
1. Hay Fever in Sacramento Valley.
  2. Cinchona Derivatives in Treatment of Cardiac Irregularities.
  3. Treatment of Thromboangitis Obliterans.
  4. Diagnosis and Treatment of Anthrax.
- R. W. Harvey, M. D.**, 711 Fitzhugh Building, 384 Post Street, San Francisco.
1. The Personality of the Patient.
  2. The Vegetative Nervous System.
  3. Vocational Education in the Rehabilitation of Nervous Cases.
  4. Epidemic Encephalitis.
  5. Combined System Disease.
  6. Treatment of Neurosyphilis.
  7. Psychasthenia and Its Treatment.
- Samuel H. Hurwitz, M. D.**, 1214 Medico-Dental Building, 490 Post Street, San Francisco.
1. The Present Outlook of the Treatment of Asthma and Hay Fever Patients.
  2. Present-Day Views of Essential Hypertension and Its Treatment.
  3. The Value of Bacillus-Acidophilus Therapy in Chronic Constipation.
  4. Light and Health.
- W. H. Kellogg, M. D.**, State Hygienic Laboratory, Berkeley.
1. The Problem of Diphtheria.
  2. Present Status of the Schick Test and Immunization Against Diphtheria.
  3. The Practicing Physician and Preventive Medicine.
  4. The Old and the New Public Health.
  5. Immunologic Reactions of Especial Interest to the Practicing Physician.
  6. The Status of Laboratories in the Practice of Medicine.
- William J. Kerr, M. D.**, University of California Hospital, San Francisco.
1. Treatment of Heart Disease.
  2. Diagnosis and Medical Treatment of Goiter.
  3. The Cardiac Irregularities, Their Recognition, Treatment, and Prognosis. (Lantern Slides.)
  4. Liver Function Tests. (Lantern Slides.)
- (Dr. Kerr would be glad to present any phase of the subject of heart disease and its treatment or would be glad to discuss the subject of pneumonia and empyema from the diagnostic and therapeutic standpoint.)
- Alison R. Kilgore, M. D.**, 724 Medico-Dental Building, 490 Post Street, San Francisco.
1. Treatment of Mouth and Skin Cancer by Surgery or Radium.
  2. The Precancerous Conditions of the Breast.
  3. Clinical and X-Ray Diagnosis of Bone Tumors.
  4. The Diagnosis of Early Breast Lumps by Gross Pathology at the Operating Table.
- Eugene S. Kilgore, M. D.**, 724 Medico-Dental Building, 490 Post Street, San Francisco.
1. Precordial Pain—Clinical Types and Significance.
  2. The Assessment of Circulatory Efficiency.
  3. Cardiac Irregularities—Their Noninstrumental Recognition and Significance.
- Henry A. R. Kreutzmann, M. D.**, 1195 Bush Street, San Francisco.
1. Sources of Error in the Diagnosis of Urinary Calculi.
  2. Causes and Treatment of Residual Bladder Urine.
  3. Urinary Tract Lesions Simulating Abdominal Diseases.
- Fred H. Kruse, M. D.**, 916 Fitzhugh Building, 384 Post Street, San Francisco.
1. The Irritable Colon. (Lantern Slides.)
  2. The Redundant Colon. (Lantern Slides.)
  3. Peptic Ulcer, Etiology and Diagnosis. (Lantern Slides.)
  4. The Medical Treatment of Peptic Ulcer.
  5. Clinical Studies in Thyroid Disease.
  6. Intestinal Toxemias.
  7. Functional Dyspepsia.
- Robert William Langley, M. D.**, 802 Professional Building, 1052 West Sixth Street, Los Angeles.
1. Heart Disease and Its Relation to Obstetrics.
  2. Fluoroscopic Study of the Heart. (Lantern Slides.)
  3. Modern Medicine and the Public Attitude.
  4. Chronic Heart Disease and Its Management.
  5. Angina Pectoris.
  6. The Management of Heart Disease in School Children.
- E. Eric Larson, M. D.**, Woodland Clinic, Woodland.
1. Treatment of Peptic Ulcer.
  2. Treatment of Empyema.
  3. Repair of Postoperative Herniae.
  4. Treatment of Prostatic Disease.
  5. Diagnosis of Goiter.
- John D. Lawson, M. D.**, Woodland Clinic, Woodland.
1. Treatment of Acute Pyogenic Skin Infection by Roentgen Ray.
  2. Cholecystography. (Lantern Slides.)
  3. Use of Lipiodol in Demonstrating Fistulous Tracts. (Lantern Slides.)
  4. Pyelography as a Differential Diagnostic Measure. (Lantern Slides.)
  5. Diagnosis of Duodenal Ulcer. (Lantern Slides.)
- Hans Lissner, M. D.**, 204 Fitzhugh Building, 384 Post Street, San Francisco.
1. The Influence of the Pituitary, Thyroid and Adrenal Glands on Ovarian Function. (Lantern Slides.)
  2. Clinical Experiences with Collip's Parathyroid Extract. (Lantern Slides.)
  3. Hypophyseal Syndromes; Diagnosis and Treatment. (Lantern Slides.)
  4. Roentgenology as an Aid in the Diagnosis of Ductless Gland Disease. (Lantern Slides.)
  5. The Differential Diagnosis and Treatment of Goiter. (Lantern Slides.)
- George Warren Pierce, M. D.**, 720 Medico-Dental Building, 490 Post Street, San Francisco.
1. Plastic Surgery in Civil Practice. (Lantern Slides.)
  2. Care of the Injured Hand. (Lantern Slides.)
  3. The Use of the Tubed Pedicle Flap in Plastic Surgery. (Lantern Slides and Moving Pictures.)
  4. Plastic Reconstruction of the Hand. (Lantern Slides.)
  5. Plastic Surgery of the Nose. (Lantern Slides.)
  6. Reconstruction of the Eye-Socket. (Lantern Slides and Moving Pictures.)
  7. The Treatment of Burns. (Lantern Slides.)
- Philip H. Pierson, M. D.**, 811 Medico-Dental Building, 490 Post Street, San Francisco.
1. Diagnosis and Treatment of Bronchiectasis.
  2. Bronchial Asthma—Diagnostic Methods and Treatment.
  3. Is Tuberculosis Dangerous to Pregnancy?
  4. Can We Diagnose Tuberculosis Entirely from the X-Ray? What Conditions Stimulate It? (Lantern Slides.)
  5. Pleural Effusion, With or Without Pus. What Does It Mean from a Tuberculosis Viewpoint?
  6. Hemoptysis—Its Importance and Treatment.
  7. Pneumothorax—Its Indications and Contraindications—Cause of Failures—Results.
  8. What Forms of Therapy for Tuberculosis have Stood the Test and What are Their Indications?
- V. H. Podstata, M. D.**, The Livermore Sanitarium, Livermore.
1. The Unusual (Problem) Child.
  2. The Varieties of Incipient Mental Depression. (Doctor Podstata not available on Tuesdays.)
- D. Schuyler Pufford, M. D.**, Woodland Clinic, Woodland.
1. Insulin Therapy.
  2. Application of the Clinical Laboratory to the Practice of Medicine.
  3. Grading of Neoplasms.
  4. Dietary Treatment of Epilepsy.
- J. Marion Read, M. D.**, 1183 Flood Building, 870 Market Street, San Francisco.
1. Classification and Treatment of Thyroid Disease. (Lantern Slides.)
  2. The Relation of Iodin to Thyroid Disease. (Lantern Slides.)
  3. The Prognosis and Treatment of Graves' Disease. (Lantern Slides.)
- Francis H. Redewill, M. D.**, 1117 Flood Building, 870 Market Street, San Francisco.
1. Impotence—Latest Methods of Treatment with Diathermy, Quartz Light and Gland Transplant. (Lantern Slides.)
  2. Tumors of Prostate and Bladder. (Lantern Slides.)
  3. Hydronephrosis—Latest Findings in Respect to the Part Played by Pylouvenous Back Flow. (Lantern Slides.)
  4. Diathermy in Urology, Practical Demonstration with Machine.
  5. Perineal Prostatectomy, Latest Technique, Fore and Postoperative Care.
  6. Mercurochrome, Its Use with Foreign Protein and Sugar.
  7. Testicular Tumors and Deep X-Ray Therapy. (Lantern Slides.)
  8. Treatment of Acute Gonorrhea. (Lantern Slides.)
- Alfred C. Reed, M. D.**, 715 Fitzhugh Building, 384 Post Street, San Francisco.

1. Intestinal Protozoa in Clinical Practice.
  2. Similarities of Sprue and Pernicious Anemia.
  3. Treatment of Dysentery.
  4. Management of Asthma.
  5. Avoiding Old Age and the Preservation of Youth.
  6. Tropical Disease in California.
- Robert Lewis Richards, M. D.**, 409 Fitzhugh Building, 384 Post Street, San Francisco.
1. The Connecting Link Between Mental and Physical Medical Facts.
  2. Psychoses Look at the Doctor.
  3. Psychiatric Endocrinology.
  4. Bad Parents and Fearful Children. Why?
- Emmet Rixford, M. D.**, 1795 California Street, San Francisco.
1. Mechanics of Production of Fractures. (Lantern Slides.)
  2. General Principles of Treatment of Fractures.
  3. Ulcer of the Stomach and Duodenum.
  4. Cancer of the Stomach.
  5. Cancer of the Colon and Rectum.
  6. Coccidioid Granuloma—The San Joaquin Valley Disease.
  7. Goiter and Other Diseases of the Thyroid Gland.
  8. Surgery of the Lymphatic System.
  9. Surgery of the Gall Bladder and Bile Ducts.
  10. Hernia.
- Hobart Rogers, M. D.**, 242 Moss Avenue, Oakland.
1. Practical Aspects of Cardiology.
- Max Rothschild, M. D.**, 704 Fitzhugh Building, 384 Post Street, San Francisco.
1. The Early Diagnosis of Pulmonary Tuberculosis.
  2. The Diagnosis and Treatment of Tuberculosis of Bronchial Glands in Children. (Lantern Slides.)
  3. The Problem of Immunity in Tuberculosis.
  4. The Treatment of Tuberculosis with Specific Remedies. (Lantern Slides.)
  5. The Treatment of Tuberculosis with Nonspecific Remedies, with Special Reference to Pneumothorax Treatment. (Lantern Slides.)
  6. Tuberculosis and Pregnancy.
  7. Tuberculosis and Syphilis. (Lantern Slides.)
  8. Fever in Tuberculosis—Its Significance in Regard to Diagnosis, Treatment, and Prognosis.
  9. Heliotherapy and Tuberculosis. (Lantern Slides.)
  10. Lung Abscess—Etiology, Diagnosis, and Treatment. (Lantern Slides.)
- Albert H. Rowe, M. D.**, 242 Moss Avenue, Oakland.
1. Diagnosis and Treatment of Seasonal and All-Year-Round Type of Hay Fever and Bronchial Asthma. (Lantern Slides.)
  2. The Role of Allergy in the Production of Respiratory, Gastro-Intestinal, Cutaneous, and Other Disease Syndromes. (Lantern Slides.)
  3. Comment on the Methods and Results of the Insulin Treatment of Diabetes. (Lantern Slides.)
- C. O. Sappington, M. D.**, 1706 Broadway, Oakland.
1. Industrial Hygiene as a Medical Specialty. (Lantern Slides.)
  2. Periodic Health Examinations—The Need, Technique and Results. (Lantern Slides.)
  3. Industrial Lead Poisoning.
  4. Industrial Absenteeism—An Application of Statistics to Medical Practice. (Lantern Slides.)
  5. The Co-ordination of Health Work in Schools and Industries.
  6. The Economic Loss Due to Sickness in Industry. (Lantern Slides.)
  7. Problems in Industrial Ventilation and Illumination. (Lantern Slides.)
  8. The Administration of Part-Time Medical Services in Smaller Industries.
  9. Standards for Industrial Physical Examinations.
- John Hunt Shephard, M. D.**, Twohy Building, San Jose.
1. Squamous Cell Epithelioma of the Lip—Special Reconsideration of Grading the Degree of Malignancy. (Lantern Slides.)
  2. Our Present Knowledge of Thyroid Perversion.
- Harry Spiro, M. D.**, 501 Flood Building, 870 Market Street, San Francisco.
1. Angina Pectoris.
  2. Some Related Cardiac Irregularities.
  3. Quinidine Therapy—A Safe Indication.
  4. Aortitis. (Lantern Slides.)
  5. Blood Pressure and Its Treatment.
  6. Judging the Quality of the Heart Muscle by Fluorocopy.
  7. X-Ray Examination of Heart and Aorta. (Lantern Slides.)
  8. Aortic Stenosis.
- William E. Stevens, M. D.**, 602 Flood Building, 870 Market Street, San Francisco.
1. Urology in Women.
  2. Diagnosis and Treatment of Pathologic Conditions of the Urinary Tract During Infancy and Childhood.
  3. Urinary Calculi.
- Steele F. Stewart, M. D.**, 817 Westlake Professional Building, 2007 Wilshire Boulevard, Los Angeles.
1. The Convalescent Care of Infantile Paralysis.
  2. The Treatment of Recurrent Dislocations.
  3. The Treatment of Spastic Paralysis.
- Laurence R. Taussig, M. D.**, 803 Fitzhugh Building, 384 Post Street, San Francisco.
1. Malignancies of the Skin, Their Diagnosis and Treatment. (Lantern Slides.)
- H. J. Templeton, M. D.**, 3115 Webster Street, Oakland.
1. Dermatologic Manifestations of Syphilis. (Lantern Slides.)
  2. Modern Considerations of Syphilis.
  3. Common Dermatoses. (Lantern Slides.)
- E. B. Towne, M. D.**, Union Square Building, 350 Post Street, San Francisco.
1. Diagnosis and Treatment of Tumors of the Brain. (Lantern Slides.)
  2. Diagnosis and Treatment of Pituitary Tumors. (Lantern Slides.)
  3. Diagnosis and Treatment of Tumors of the Spinal Cord. (Lantern Slides.)
  4. Diagnosis and Treatment of Trigeminal Neuralgia.
  5. Treatment of Injuries of the Brain and Spinal Cord.
  6. The Roentgen Ray in Neurosurgical Diagnosis and Treatment. (Lantern Slides.)
- William Voorsanger, M. D.**, 1001 Medico-Dental Building, 490 Post Street, San Francisco.
1. Pulmonary Conditions Wrongly Diagnosed as Tuberculosis. (Lantern Slides.)
  2. Tuberculosis Laryngitis—Is It Curable? Heliotherapy as a Remedy.
  3. Gastrointestinal Complications in Pulmonary Tuberculosis.
  4. Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis.
  5. Undiagnosed Coughs.
  6. Advances in the Diagnosis of Pulmonary Tuberculosis.
  7. Suggestions on the Importance of the Sanitarium in the Treatment of Pulmonary Tuberculosis.
  8. Pulmonary Abscess; Classification; Prognosis and Treatment. (Lantern Slides.)
- James T. Watkins, M. D.**, 212 Medical Building, 909 Hyde Street, San Francisco.
1. Technical Improvements in the Treatment of Fractures.
  2. Surgical Approaches of the Knee, Hip, and Shoulder Joints.
  3. Congenital Hip and Club-Foot.
  4. Treatments of Infantile Paralysis.
- Miley B. Wesson, M. D.**, 1275 Flood Building, 870 Market Street, San Francisco.
1. Urethritis and Sequelae. (Lantern Slides.)
  2. Diseases of the Prostate: Their Treatment—Medical and Surgical. (Lantern Slides.)
  3. The Prostatic Median Bar—Complications and Treatment. (Lantern Slides.)
  4. Diseases of the Bladder—Symptoms and Treatment. (Lantern Slides.)
  5. Diseases of the Kidney and Ureter—Symptoms and Treatment. (Lantern Slides.)
  6. Cysts of the Prostate and Urethra. (Lantern Slides.)
  7. Rupture of the Kidney—Symptoms and Treatment. (Lantern Slides.)
  8. Tumors of the Testicle—Diagnosis and Treatment. (Lantern Slides.)
- Julian M. Wolfsohn, M. D.**, 1401 Medico-Dental Building, 490 Post Street, San Francisco.
1. Diagnosis and Treatment of Subacute Combined Degeneration of the Spinal Cord, and of Multiple Sclerosis. (Lantern Slides.)
  2. Mechanism and Treatment of Hysteria.
  3. Poliomyelitis and Lethargic Encephalitis—Their Diagnosis and Treatment. (Lantern Slides.)
  4. Demonstration of the Use of Lipiodol in Spinal Cord Tumors and Subarachnoid Block.
  5. Syphilis of the Central Nervous System. (a) Diagnosis. (b) Discussion and Demonstration of the Modern Treatments, Including the Malarial Treatment of General Paralysis.
  6. Demonstration of Puncture of the Cisterna Magna.
- John Homer Woolsey, M. D.**, 907 Medico-Dental Building, 490 Post Street, San Francisco.
1. Gastric and Duodenal Pathology. (Lantern Slides.)
  2. Empyema and Subphrenic Abscess. (Lantern Slides.)
  3. Carcinoma of the Rectum. (Lantern Slides.)
  4. Wound Infections.

#### COUNCIL MINUTES APPROVED AT THE ONE HUNDRED AND SIXTY-THIRD MEETING OF THE COUNCIL

*Minutes of the One Hundred and Fifty-ninth Meeting of the Council of the California Medical Association—Held in Room 201, Hotel Oakland, Oakland, California, Tuesday, April 27, 1926, at 8 p. m.*

**Present**—Doctors Ewer, McArthur, Catton, Kinney, Kiger, Bingaman, Beattie, Smith, Peers, Kress, Shoemaker, Gibbons, Pope, and General Counsel Peart.

**Absent**—Doctors Parkinson, DeLappe, Coffey, McLeod, Bine, and Curtiss.

1. **Illness of James H. Parkinson**—The secretary read a letter from James H. Parkinson, Sacramento, submitting his resignation as councilor of the Eighth District, on account of illness. Drs. R. L. Rigdon, San Francisco, and George J. Hall, Sacramento, addressed the Council at Doctor Parkinson's request.

On motion of Kress, seconded by Catton it was Resolved, That the Council request that Doctor Parkin-



son withdraw his resignation as Councilor of the Eighth District; that the Council send him good wishes and express its great sorrow on learning of his illness; that a special committee be appointed to draft a letter to be sent to Doctor Parkinson; and that a committee on behalf of the Council visit him.

Doctor Ewer, presiding officer, appointed William T. McArthur a committee of one to draft the special letter to Doctor Parkinson expressing the sorrow of the Council, and Robert Peers a committee of one to visit Doctor Parkinson on behalf of the Council.

**2. Appointment of Temporary Chairman**—The president, Edward N. Ewer, announced that in the absence of Doctor Parkinson it would be necessary to appoint a temporary chairman.

On motion of Catton, seconded by Kiger, it was

Resolved, That Morton R. Gibbons, San Francisco, act as temporary chairman of the Council.

Doctor Gibbons then took the chair, and called the meeting to order.

**3. Minutes of the Hundred and Fifty-eighth Meeting of the Council**—The secretary read the minutes of the hundred and fifty-eighth meeting of the Council. On motion of McArthur, seconded by Beattie, it was

Resolved, That the minutes of the hundred and fifty-eighth meeting of the Council, as mailed to each member thereof, be approved.

**4. Minutes of the Eighty-ninth Meeting of the Executive Committee**—The secretary read the minutes of the eighty-ninth meeting of the Executive Committee, which were approved as read.

**5. Minutes of the Ninetieth Meeting of the Executive Committee**—The secretary read the minutes of the ninetieth meeting of the Executive Committee, which were approved as read.

**6. Report of the Chairman of the Council**—The report of the Council as prepared by James H. Parkinson, chairman, was read by the secretary, discussed section by section, and a few minor changes in phraseology made.

On motion of Ewer, seconded by McArthur, it was

Resolved, That the report of the Council be approved as amended.

**7. Clinical Prizes**—Dudley M. Fulton, chairman of the Committee on Clinical Prizes read the formal report of the committee, in which the committee recommended that no award be made for the contributions on research work, but the paper of Albert H. Rowe and Hobart Rogers, entitled "A Study of Carbohydrate Tolerance in Normals and Non-Diabetics," receive honorable mention; and the paper of Emil Bogen entitled "Arachnidism, A Study of Spider Poisoning" be awarded the prize for the best clinical essay, and that it be recommended for publication in the Archives of Internal Medicine.

On motion of Catton, seconded by Peers, it was

Resolved, That the paper entitled "Arachnidism, A Study of Spider Poisoning" by Emil Bogen be awarded the prize for the best essay on a clinical subject and that the paper be submitted for publication in the Archives of Internal Medicine and an abstract be published in CALIFORNIA AND WESTERN MEDICINE; that the prize for the best essay on research work be not awarded, but the paper entitled "A Study of Carbohydrate Tolerance in Normals and Non-Diabetics" by Albert H. Rowe and Hobart Rogers be awarded honorable mention.

On motion of Kress, seconded by Kinney, it was

Resolved, That the thanks of the Council be tendered the Clinical Prize Committee for the services rendered and that the committee be continued.

**8. Board of Trustees**—The advisability of the Association providing for a board of trustees to exercise a custodianship of Association funds and properties somewhat after the fashion of the Board of Trustees of the American Medical Association was discussed.

It was the sense of the Council that amendments to the Constitution and By-Laws should be submitted providing for such a board.

**9. Meeting with Members of the State Board of Medical Examiners**—The secretary advised that John C. Yates of the Legal Department of the State Board of Medical Examiners was anxious to discuss various legal

questions with members of the Council. The Chair appointed Doctors Kress and Bingaman to meet with Doctor Yates.

**10. Adjournment**—There being no further business, the Council adjourned to meet in the same place at 10 a. m. Wednesday, April 28.

*Minutes of the One Hundred and Sixtieth Meeting of the Council of the California Medical Association*—Held in Room 201, Hotel Oakland, Oakland, California, Wednesday, April 28, 1926, at 10 a. m.

**Present**—Doctors Ewer, McArthur, Kinney, Kiger, Bingaman, DeLappe, Smith, McLeod, Peers, Kress, Shoemaker, Gibbons, Pope, and General Counsel Peart.

**Absent**—Doctors Parkinson, Beattie, Coffey, Catton, and Curtiss.

**Invited**—Doctor Musgrave.

**1. Place of Meeting for 1927**—The secretary read letters inviting the Association to hold the 1927 annual meeting at Santa Cruz from Hotel Casa del Rey and the Santa Cruz Chamber of Commerce; letter from the San Francisco Tourists and Convention League inviting the Association to San Francisco; and letter from the Hotel Biltmore, Los Angeles.

Action by the Council—On motion of Kiger, seconded by Peers, it was

Resolved, That the annual meeting for 1927 be held at Los Angeles and the invitation of the Los Angeles Biltmore inviting the Association to make that hotel its headquarters be accepted; the exact date of meeting to be fixed later.

Discussion was had as to the date of the 1927 annual meeting, and it was stated that the latter part of April and approximately two weeks prior to the annual meeting of the American Medical Association was the most desirable time; the exact date to be set later.

**2. History of the California Medical Association**—Report of Emmet Rixford, chairman of the Committee on the Preservation of the History of the California Medical Association, was read by the secretary.

Action by the Council—On motion of Shoemaker, seconded by McArthur, it was

Resolved, That the report of the Committee on the Preservation of the History of the California Medical Association be accepted and that the committee be continued.

**3. California and Western Medicine**—Memorandum from the editor regarding the advisability of making CALIFORNIA AND WESTERN MEDICINE the accredited spokesman of various legitimate organizations throughout the state was read. William E. Musgrave, editor, advised that he was anxious to have a circulation of six thousand so that he could increase the advertising rate.

It was the sense of the Council that Doctor McArthur be appointed a committee of one to investigate the possibility of the Hawaiian Islands coming into the Association on the same basis as Utah and Nevada.

Action by the Council—On motion of Kress, seconded by Peers, it was

Resolved, That a special committee be appointed to make an investigation of the matter of enlarging the scope of CALIFORNIA AND WESTERN MEDICINE and report as to what is considered the best conclusion in the matter.

**4. Bibliographies**—The question of the inclusion of bibliographies in CALIFORNIA AND WESTERN MEDICINE was discussed. The editor spoke of the inaccuracies of bibliographies submitted by different writers.

Action by the Council—On motion of Shoemaker, seconded by McArthur, it was

Resolved, That the report of Doctor Musgrave be accepted and that the matter of the inclusion of bibliographies be left to the discretion of the editor.

**5. Size of Reprints**—The most desirable size of reprints from CALIFORNIA AND WESTERN MEDICINE was discussed. It was pointed out that the type for these reprints was set at the time the journal was printed, and the use of a 7 x 10-inch page would necessitate a ridiculously wide margin if one column were used or practically no margin if two columns were set to the page. Further that a column width other than that used in CALIFORNIA AND

WESTERN MEDICINE would put the C. M. A. to tremendous extra expense.

Action by the Council—On motion of Kress, seconded by Shoemaker, it was

Resolved, That the action of the Executive Committee on the size of reprints taken at the ninetieth meeting thereof be rescinded; and that the reprint be along the lines of general usage at the discretion of the editor.

6. **Report of the Secretary**—Emma W. Pope of San Francisco read the secretary's report, in which was pointed out the present financial status of the Association and its activities during the year.

It was the sense of the Council that the report be accepted and that it be submitted at the first meeting of the House of Delegates.

7. **Prenatal Pamphlet**—The secretary advised that the present status of the Prenatal Pamphlet is that the Board of Health is willing to publish this pamphlet when they have the necessary fund and send the pamphlet out in conjunction with the letters which the Association desired to replace with this pamphlet. Letter from Doctor Bine was read in which he suggested that the Association print the pamphlet bearing the expense itself and sell to the members of the Association for 10 cents per copy. The question of the advisability of the Association, both from the standpoint of policy and money expense, entering this class of public health publicity and thus establishing a precedent was discussed.

Action by the Council—On motion of Kress, seconded by Kiger, it was

Resolved, That a special committee consisting of Doctor Peers and Doctor Pope look into the matter further and see whether anything can be done to map out a course of procedure agreeable to both the State Board of Health and the committee of this Association which compiled the prenatal literature.

8. **Technical Specialties**—Joseph Catton, chairman of the special committee appointed to investigate various questions relating to technical specialties, informed the Council that he had met with his committee, and although the committee felt that no definite action should be taken at this time, it believed that no organization other than properly qualified physicians and surgeons should hold membership or other official connection with the Association, but that the Association should let it be known that it stood ready to offer counsel or advice to such persons or organizations as may be rightly interested in public health questions.

The manner in which the Technical Specialties were affiliated with the C. M. A. at the Coronado meeting was also discussed.

Action by the Council—On motion of Kress, seconded by McArthur, it was

Resolved, That inasmuch as the specialties were affiliated some years ago that the matter be laid on the table for further study and consideration.

9. **Affiliate Members**—Approval of the Council was asked of the following applicants for affiliate membership: Brett Davis, Merced County; Robert Doig, San Diego, San Diego County; William L. Gatchell, Chico, Butte County; Ashbury Loper, Dinuba, Tulare County; William V. D. Nichols, Oceanside, San Diego County; Oscar Stansbury, Chico, Butte County.

Action by the Council—On motion of Shoemaker, seconded by Catton, it was

Resolved, That Brett Davis, Robert Doig, William LeF. Gatchell, Ashbury N. Loper, William Van D. Nichols, and Oscar Stansbury, be accepted as affiliate members of the California Medical Association.

10. **Adjournment**—There being no further business, the meeting adjourned to meet in the same place at 2 p. m., Thursday, April 29.

*One Hundred and Sixty-first Meeting of the Council of the California Medical Association*—Held in Room 201, Hotel Oakland, Oakland California, Thursday, April 29, 1926, at 2 p. m.

**Present**—Doctors Ewer, McArthur, Kinney, Kiger, Bingaman, DeLappe, Beattie, Smith, Catton, Peers, Kress, Shoemaker, Gibbons, Pope, and General Counsel Peart.

**Absent**—Doctors Parkinson, Coffey, McLeod, Bine, and Curtiss.

1. **Industrial Medical Practice**—The report of the Committee on Industrial Medical Practice was read by the secretary.

Action by the Council—On motion of Catton, seconded by DeLappe, it was

Resolved, That the report of the committee be accepted and that the committee be continued; that the committee be advised that the violation of these ethics as of any other ethics of the Association may very properly be brought before the county society as provided in the by-laws, and that the full co-operation of the Council may be expected when the matter is brought before that body.

The question of handling cases for the large commercial concerns who prefer to have all cases handled by a representative in the city where the main office is located was discussed. The general counsel advised the formation of a group of doctors to handle this class of practice with a good man for manager of the central office.

2. **National Endowment Fund**—The secretary presented correspondence from the National Endowment Fund of the Physicians' Home which had been referred to the Council by the editor, in which they requested publicity in CALIFORNIA AND WESTERN MEDICINE.

It was the sense of the Council that the secretary should write to some of the doctors listed and secure further information regarding the plan.

3. **Report of the Legal Department**—The General Counsel presented the report of the Legal Department and outlined briefly the conditions of claims and cases that had come before the department in the preceding year. It was the sense of the Council that the report be received and placed on file.

4. **List of Physicians and Hospitals for State Automobile Associations**—The General Counsel advised that the Northern California Automobile Association felt that the distribution of lists of physicians and hospitals would not be practicable on account of the varying opinions of the members of the Automobile Association. It was suggested that as no progress could be made, the matter be dropped.

5. **Unsolicited Merchandise**—The secretary presented a letter from the Retail Merchants' Association of San Francisco in which they requested approval of H. R. Bill 3991 prohibiting the sending of unsolicited merchandise through the mail. It was the sense of the Council that the letter be filed.

6. **Publication of Revised Constitution and By-Laws**—It was pointed out that the present edition of the Constitution and By-Laws had been amended to such an extent that it was practically useless and very confusing. It was the sense of the Council that the matter of publishing a revised edition be laid over until next year on account of the numerous amendments that would be acted upon at that time.

7. **Indemnity Defense Fund**—The Council was advised that it was necessary to elect a trustee of the Indemnity Defense Fund at this session as the term of Lemuel P. Adams, Oakland, expired.

Action by the Council—On motion of Smith, seconded by Peers, it was

Resolved, That Lemuel P. Adams be elected trustee of the Indemnity Defense Fund for the ensuing three years.

8. **Smallpox Situation**—Discussion was had as to the smallpox situation in California during the past few months, and the value of vaccination as a true preventive outlined. Also whether it was good policy for the C. M. A. to strive any longer for compulsory vaccination laws.

Action by the Council—On motion of Kress, seconded by DeLappe, it was

Resolved, That it be the opinion of the Council that this body is in hearty favor of vaccination and urges all of its members to insistently advocate vaccination to friends, patients, and the public.

9. **Committee on the Medical Practice Act**—Discussion was had as to the feasibility of submitting a revised Medical Practice Act to the people by the initiative. The

committee, consisting of George H. Kress, chairman, and Harlan Shoemaker, through George H. Kress submitted the following report for consideration by the Council:

1. As regards a model medical practice act to be brought into being through an initiative to be voted upon by the citizens of the state, it was felt that though a model medical practice act was in many ways desirable, there were nevertheless so many immediate practical obstacles, such as the expense of bringing such an initiative before the people, that it seemed not possible to bring such a proposed initiative before the people in time for consideration at the next general election.

In these viewpoints through conference with the members of the Law and Education Committee of the California State Board of Medical Examiners, we find that the State Medical Board also concurs.

2. No new medical practice act through initiative being possible at this time, the question arises as to how our present medical law may be desirably amended at the California legislature, which meets in January, 1927.

Such outstanding amendments to be specially considered are:

(a) A different method of appointment of members of the Board. At present the Governor has the sole power of appointment. The substitute plan now proposed is to revert to the original method provided in our 1903 Medical Practice Act, namely that the Governor make his State Medical Board appointments from three lists of nominees to be presented to him through the state medical societies, viz., The California Medical Association, the California Homeopathic Association, and the California Eclectic Medical Association. The Board to consist of ten members: seven of them regulars, two homeopaths, and one eclectic. Each of these societies to submit to the Governor twice the number of names possible of appointment from its group. In our California Medical Association that would mean fourteen nominees to go to the Governor. These nominees to be elected by the Council of the California Medical Association.

(b) A proposed amendment permitting medical undergraduates of accepted schools to take examinations on the fundamental medical studies at the satisfactory completion of their second year in a medical school of accepted standard.

Your committee presents the above as desirable amendments, and in conference with a special committee of the California State Board of Medical Examiners that committee also tentatively concurred in the advisability of such changes.

3. The committee also requests authority to appoint an advisory subcommittee of educators and others to aid in its work. The names of Drs. Ray Lyman Wilbur, Percy T. Magan, and Dean L. S. Schmitt are suggested as possible members of the committee.

4. Your committee submits the above and requests permission to have the General Counsel of our society cooperate in drawing up the proposed initiative bill and amendments so that they may be submitted to the Council, to determine in what form, etc., any amendments are to be presented to the legislature in case such action should be decided upon.

Action by the Council—On motion of McArthur, seconded by Kinney, it was

Resolved, That the report of the Special Committee on the Medical Practice Act be accepted.

10. Arrangements Committee—Drs. William Duffield, Harlan Shoemaker, George Kress, William H. Kiger, Wayland Morrison, and Albert Soiland were appointed members of the Arrangements Committee for the 1927 annual meeting at Los Angeles; William Duffield to act as chairman.

11. Sheppard-Towner Act—Edward N. Ewer, chairman of the committee appointed to investigate the Sheppard-Towner Act legislation, advised that sufficient time had not elapsed since the appointment of his committee to make an investigation and prepare a report for the Council.

12. Technical Specialties—Discussion was had as to the dangers which might result from dropping the Technical Specialties Section from the Association without thorough investigation and consideration of the problem.

Action by the Council—On motion of Kress, seconded by Ewer, it was

Resolved, That a committee of fifteen—five from the North, five from the South, and five at large—with a central chairman, be appointed to make a survey of the whole subject and bring in a report to the Council.

13. Resignation of Doctor Bine—Morton R. Gibbons, acting chairman of the Council, informed the Council that Doctor Bine had sent his formal resignation as councilor-at-large to the Association. Doctor Bine's letter was then read. It was the sense of the Council that the letter be filed.

14. Adjournment—There being no further business, the Council adjourned to meet in the same place on Saturday, at 10 a. m., unless a special meeting be called sooner by the chairman.

*One Hundred and Sixty-Second Meeting of the Council of the California Medical Association—Held in Room 201, Hotel Oakland, Oakland, California, Saturday, May 1, at 10 a. m.*

**Present**—Doctors McArthur, Phillips, Kinney, Kiger, Bingaman, DeLappe, Shephard, Coffey, Hamlin, Rogers, Kress, Shoemaker, Catton, Gibbons, Pope, and General Counsel Peart.

**Absent**—Doctors Parkinson and Curtiss.

1. Absence of Doctor Hamlin—Morton R. Gibbons, temporary chairman of the Council, advised that word had been received from Dr. O. D. Hamlin that he was unavoidably delayed, but would arrive shortly after the Council convened.

2. Adjournment of 1925 Council—On motion duly made and seconded, it was

Resolved, That the 1925 Council adjourn; that the 1926 Council convene; and that the secretary call the roll.

**Present**—Doctors Phillips, McArthur, Kinney, Kiger, Bingaman, DeLappe, Shephard, Coffey, Kress, Shoemaker, Catton, Gibbons, Pope, and General Counsel Peart. Doctor Hamlin arrived at 10:20.

**Absent**—Doctors Parkinson, Rogers, and Curtiss.

3. Election of Chairman—On motion of Kress, seconded by Peers, it was unanimously

Resolved, That O. D. Hamlin, Oakland, be elected chairman of the Council for the ensuing year.

4. Appointment of Editor—On motion of McArthur, seconded by Peers, it was unanimously

Resolved, That William E. Musgrave of San Francisco be reappointed to succeed himself as editor of CALIFORNIA AND WESTERN MEDICINE for the ensuing year.

5. Appointment of Secretary—On motion of Kress, seconded by Shoemaker, it was

Resolved, That Dr. Emma W. Pope of San Francisco be appointed to succeed herself as secretary of the Association for the ensuing year.

6. Appointment of General Counsel—On motion of McArthur, seconded by Peers, it was

Resolved, That Hartley F. Peart of San Francisco be reappointed to succeed himself as counsel for the Association for the ensuing year.

7. Appointment of Assistant General Counsel—On motion of Kiger, seconded by McArthur, it was

Resolved, That Hubert T. Morrow of Los Angeles be reappointed to succeed himself as assistant general attorney for the ensuing year.

8. O. D. Hamlin—Dr. O. D. Hamlin arrived at this point and Morton R. Gibbons, temporary chairman, informed Doctor Hamlin of his election as chairman of the Council. Doctor Hamlin then took the chair.

9. Motion of Appreciation—On motion of Kress, seconded by Peers, it was

Resolved, That the thanks of the Council be extended Morton Gibbons for the able manner in which he conducted the sessions of this meeting.

10. Western Urological Society—The secretary advised that section officers complained that the meeting of the Western Urological Society had interfered with the attendance of the meeting of the Urological Section and that some action should be taken so that such meetings



would not conflict with meetings of the various sections.

Action by the Council—On motion of Kress, seconded by Kiger, it was

Resolved, That this Council inform the Program Committee that in the opinion of the Council it is most inadvisable to print the program of any other organization of medicine in our official program of the California Medical Association where there is danger of conflict in meetings.

In making up the program of future meetings, the Council instructed the secretary to call such organizations as are included in the Technical Specialties Section "Affiliate Group Meetings" and list same on a special page.

Further action by the Council—On motion of Catton, seconded by McArthur, it was

Resolved, That the action of this Council in relation to the inclusion of such organizations as are included under the Technical Specialties Section be referred to the committee of fifteen appointed to investigate this whole subject for further consideration.

11. **Better Health**—Dr. Walter B. Coffey, councilor, referred to the ownership by the Association of 200 shares of the capital stock of Better Health Incorporated, and stated that there had been some inquiry by members present at the meeting as to the present status of the affairs of that corporation. Doctor Coffey informed the Council, as chairman of the Executive Committee of Better Health, that the Board of Directors of Better Health Incorporated would cause an audit of the books of Better Health Incorporated to be made by certified public accountants at an early date and would file a copy of such audit with the secretary.

It was the sense of the Council that the chairman of the Council be instructed to surrender up the present certificates evidencing the 200 shares owned, and that a new certificate of stock be issued in the name of the present chairman of the Council as trustee for this Association.

Action by the Council—On motion of Phillips, seconded by Kiger, it was

Resolved, That the General Counsel attend to proper transfer and issuance of new certificate for the 200 shares owned by the Association.

Discussion was had as to the desirability of setting aside approximately one page of CALIFORNIA AND WESTERN MEDICINE for the exploitation of Better Health, and the opinion was expressed that the editor be consulted in this matter.

Action by the Council—On motion of Phillips, seconded by Shephard, it was

Resolved, That the matter be referred to the Executive Committee of which the editor is a member.

12. **Science League of America**—Letter from the Science League of America requesting that we distribute certain pamphlets issued by them at this annual convention was read by Doctor Catton.

It was the sense of the Council that the secretary should write a courteous reply to this letter stating that the letter had arrived too late for consideration.

13. **Donation of Share of Better Health Stock**—General Counsel Peart informed the Council that James H. Parkinson had one share of Better Health stock which he wished to give to the Association.

Action by the Council—On motion of Kress, seconded by Kiger, it was

Resolved, That the donation of one share of Better Health stock offered by James H. Parkinson be accepted.

14. **American Registered Pharmacists**—Letter from the Los Angeles branch of the American Registered Pharmacists was read by Joseph Catton, in which the Council was asked to support a bill to be presented to the legislature providing that all pharmacists should be required to have a Pharmaceutical college education.

Action by the Council—On motion of Kress, seconded by Phillips, it was

Resolved, That the matter be laid on the table for future consideration.

The opinion was expressed that the Los Angeles County Medical Society should be on the lookout for further developments.

15. **Medical Legislation**—The general counsel advised

that many movements were afoot detrimental and dangerous to the public health and opposed to the progress of scientific medicine. The work which had been done in the past by Better Health was pointed out.

Action by the Council—On motion of Kress, seconded by Phillips, it was

Resolved, That the members of the California Medical Association be circularized through the secretary asking that they make a habit of keeping Better Health on their reception-room tables and that the attention of the members of the profession be called to the fact that this is the publication by means of which they will be able to keep in touch with public health questions and with problems that endanger scientific medicine.

16. **Amendments to the By-Laws**—The proposed amendments to the By-Laws, Chapter V, Sections 13 and 15, which provide that the General Counsel shall not attend executive meetings except when his presence is requested, was discussed. Mr. Peart suggested that the proposed amendment be adopted as a resolution, inasmuch as the proposed by-law would not be considered until the next annual meeting. Doctor Phillips spoke of the desirability of having the General Counsel attend all meetings of the Executive Committee.

Action by the Council—On motion of Kress, seconded by Kiger, it was

Resolved, That in order to make it easier for the General Counsel to absent himself from Executive Committee meetings, the General Counsel attend the meetings of the Executive Committee only when requested by that committee.

17. **Welfare Work**—The splendid work being carried on by the Welfare Council of San Diego, and the growing danger of cultists in various sections of California, was discussed. Dr. Lyell C. Kinney of San Diego then requested that the courtesy of the floor be given Martha Welpton, chairman of the Welfare Council, San Diego.

Doctor Welpton gave an interesting talk outlining the work done by her group, which was sponsored by all the leading clubs carrying on welfare work, including the Parent-Teacher Association and the Federation of Women's Clubs, and stated that all examinations and health work in connection with public welfare in San Diego is now being carried on by licensed M. D.'s.

Action by the Council—On motion of Kress, seconded by Coffey, it was

Resolved, That the thanks of the Council be extended to Doctor Welpton for her presentation of the views and plans for public welfare work; that Doctor Welpton be asked to present a written report on the subject and that such report be referred to the Executive Committee for examination and report to the Council.

18. **Date of 1927 Meeting**—As reply to the telegram sent to Olin West, secretary of the American Medical Association requesting the date of the next American Medical Association meeting had not been received, it was the sense of the Council that the 1927 annual meeting of the California Medical Association be held some time in April, approximately two weeks before the American Medical Association meeting, and that the exact date be fixed by the Executive Committee.

19. **Convention Rates**—The secretary informed the Council that the different railroad companies offered convention rates of approximately one and one-third of the regular expense to groups of members attending conventions.

Action by the Council—On motion of Kress, seconded by Kiger, it was

Resolved, That hereafter on every annual program and in journal announcements of the meetings of the Association there be printed full information regarding the securing of convention rates.

20. **Vote of Thanks**—Action by the Council—On motion of Peers, seconded by Kiger, it was

Resolved, That a vote of thanks be extended to the Arrangements Committee, the Entertainment Committee, the Press Association, the Publicity Committee, and Hotel Oakland for the courtesy received during this convention.

21. **Adjournment**—There being no further business, the Council adjourned to meet some time in the fall.

## NEVADA STATE MEDICAL ' ASSOCIATION

A. J. HOOD, M. D., Elko.....President  
HORACE J. BROWN, M. D., Reno.....  
Secretary and Associate Editor for Nevada

The twenty-third annual meeting of the Nevada Medical Association is being held as we go to press. A full report should be published in the November issue.

**Nevada Medical Bulletin**—September 1, 1926—In a previous issue we asked our councilors to send in the names of the new physicians in their counties, but we have so far failed to hear from any of them. The following are members of the Council: G. L. Dempsey, W. L. Howell, J. C. Cherry, C. E. Sweezy, J. H. Hastings, D. A. Smith, W. J. Circe, W. H. Riley, C. E. Bullette, J. R. Eby, W. H. Brennen, G. L. Belanger, J. T. Rees, P. D. McLeod, F. M. West, H. L. Dalby, and M. J. Rand. We print the list for fear some may have forgotten that they are on the Board. We would appreciate it very much if these members will send us the names of all physicians that have located in their counties within the past year. We would also like to know of any removals during that time. There has been so many changes in the past two years that our records are somewhat chaotic, and your secretary would like to get the list correct.

## UTAH STATE MEDICAL ASSOCIATION

W. R. CALDERWOOD, M. D., Salt Lake.....President  
E. H. SMITH, M. D., Ogden.....President-Elect  
FRANK B. STEELE, M. D., Salt Lake.....Secretary  
J. U. GIESY, M. D., Salt Lake.....Associate Editor for Utah

### BALANCE

It is a rather wonderful thing to achieve and keep. *Mens sana in corpore sano*—a sane mind in a sound body, was the ideal of the ancients, and undeniably the ancients were right. A sane mind is a balanced mind, and a sound body is a healthy body. Wherefore, literally, balance as applying to either one means health, and unbalance spells disease.

In the light of modern investigation, we are what our chromosomes make us. In a primary sense, that is. Because, literally, balance means the resultant effect of two forces acting one against the other—an activating, stimulating force, and an inhibiting and antagonistic force. With both forces equal, balance automatically results.

The recognition of the chromosome as applying to life generation, and individual characteristics, however, goes down rather deep. It now appears that these little genetic points of impulse determine in a very positive and, in some respects, an appalling fashion, not only the racial type of the developing zygote or fertilized genetic cell, but, through their character as expressed in the progenitors from which derived, the future welfare or "balance" of the individual specimen of that life type which shall develop from it in the natural course of events.

Normal growth now appears to depend not figuratively but literally upon a balanced ratio between

two forces—the one growth stimulating and the other growth inhibiting and directing. And these elements seem to be diffusible substances derived in the metabolic processes of the body from the food.

This is rather to be expected, but it brings up as applying to balance a sort of double parallel. Here we find that balance depends not only upon the chromosomal index—the genotype—but upon an extraneous, or environmental or paratype index, depending on influences largely outside the developing cell. And once more it is upon a balance in these two forces that normal growth depends.

As applying directly to medicine and the cure or prevention of that imbalance, which is disease, these considerations bring us unavoidably to the question of inheritance, indexed mainly by the chromosome of the individual—the "gens" so called of the progenitor handed on to his offspring, and to the balanced intake of those much-talked-of food elements known as vitamins.

Other things being equal, the "gens" of the zygote or fertilized genetic cell will mirror the life future of the offspring, handing on a tissue development in the later "phenotype" commensurate with the character of the parents, with a predisposition to certain diseases through tissue weaknesses from which those parents may have suffered prior to the reproduction of their species as embodied in the individual phenotype involved.

Paratypically speaking, these tissue weaknesses will be held in complete or partial abeyance or brought to active manifestation by the environment which the phenotype later meets.

And we may certainly regard the vitamin balance as one of the most potent of these paratype influences toward the maintenance or loss of health balance, since after independent life on the part of the individual is taken up, all balance of body metabolism must essentially be derived from the ingested food.

Speaking from this standpoint, it appears that the growth-stimulating element corresponds at least in its source to Vitamin B, and that the growth-inhibiting and directing element corresponds similarly to Vitamin A. Consequently normal growth and development depends upon a balanced intake of both.

And along this line it appears that such considerations open up a wide field of speculation as applying to both the problem of cancer and the anemias, with the exception of direct primary anemia, of course. In both there is so palpably an imbalance between the inhibitory and the stimulating elements. In pernicious anemia, especially, all co-ordination seems lost. And quite admittedly cancer is a condition characterized mainly by a perversion or undirected cell multiplication more than anything else. The question therefore naturally arises as to whether or no cancer may not be so largely on the increase because of modern tendencies in the preparation and use of food. In other words, is cancer in reality a deficiency disease? Personally, we have thought so for years. But that is just our own opinion. And we are perfectly willing to admit that in considering any such issue as those we have sought to thus briefly stress, it is well to be sure that we maintain our own balance quite as a matter of course.

### REQUIESCAT

Ordinarily the passing of any one individual in a community makes but little difference, save to those closely bound to him who has departed by bonds of personal interest or sentiment.

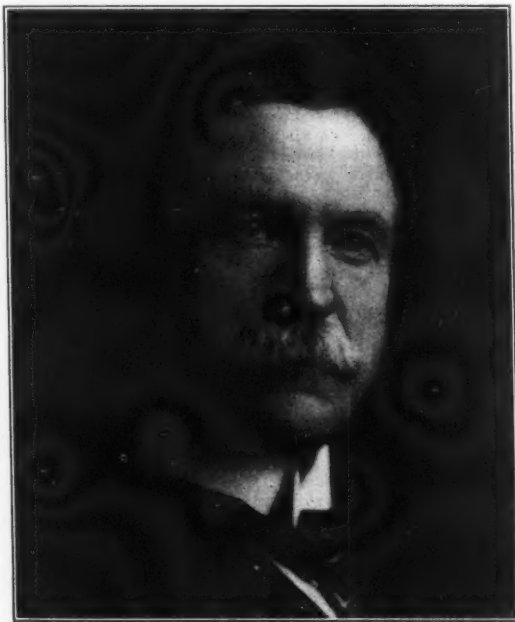
But now and again in every country or nation there comes a man who by his strength, his wisdom, his sterling human qualities rises head and shoulders above the mass of his fellows, as a splendid tree in a forest may rise above the lesser growth, so that should any disaster befall it thereafter the landscape will never be quite the same.

Elsewhere in this issue we carry the notice of the death of Dr. Samuel H. Allen, which is such a loss to the medical world of the state; and the writer takes this opportunity to voice appreciation for a departed friend.

His work well done, may he rest in peace, his memory secure in the hearts of those he served.

### THEIR LOSS IS OURS

The Utah Medical Association wishes to convey to the California Medical Association our sincere sympathy for the loss sustained in the recent death of Dr. Saxton Pope. Past any question of bereavement of his loved ones and friends, the death of such a man cannot fail to prove a loss to the medical world at large.



SAMUEL H. ALLEN

Dr. Samuel H. Allen, 64, a prominent and learned physician, died at his home recently. He was a pioneer in the medical field of Utah, and in many ways contributed to the health and welfare of its people.

Doctor Allen was the senior member of the Intermountain Clinic and a member of the Utah Medical Association.

In 1879 "Sam" Allen was so poor that he was twitted by his school-fellows for wearing wooden shoes. In that year, an ambitious lad of 17, he drove from his home in Mount Pleasant to Salt Lake, a week's journey, to attend

school at the University of Utah. He was accompanied by his father, and they had packed a load of flour, bacon, apples, and potatoes with which to pay the boy's board.

His mother, a convert to Mormonism from Derbyshire, England, was one of the courageous pioneers who trudged across the prairies in a three months' march, with two children. His father came from Liverpool to New Orleans and thence to Utah in 1853, where he married Doctor Allen's mother in 1855.

Upon his graduation from the University of Utah, he attended the Brigham Young Academy. Later he went East to complete his studies at the College of Physicians and Surgeons at Baltimore, where he was graduated in 1890, one of the four students to receive a gold medal for excellent work in all branches. He was awarded, in addition, a year's free hospital internship.

He was married in 1893 at Mount Pleasant. He moved to Provo, where he performed the first appendicitis operation in Utah.

Following a postgraduate course at Johns Hopkins University, he moved to Salt Lake and entered into partnership with Dr. George W. Middleton. There followed other postgraduate study in Chicago and New York, trips to Mexico, Europe, South America, and islands in both the Pacific and Atlantic oceans.

Doctor Allen is survived by his wife, Mrs. Ida Allen; his son, Dr. M. Lowry Allen, and his daughters, Mrs. Ward R. McAllister, Mrs. Sayman Kerr, Mrs. Joseph E. Brewster, and Miss Marjorie Allen.

Utah News—September 13, marked the resumption of regular bi-monthly meetings by the Salt Lake County Medical Society. A good attendance listened to the report of the proceedings of the Pacific Northwest Medical Association as presented by E. F. Root, newly elected president of the Association, and F. D. Spencer. President F. H. Raley presided, and secretary M. M. Critchlow was the "cheild a-takin' notes." It is anticipated that a very interesting and instructive series of scientific papers will be presented during the coming winter. We have the word of the program committee for this.

Dean Porter of the University of Utah Medical School announces that twenty-eight students have been accepted for the ensuing term. Owing to the necessity of limiting the number of students, this represents but half of the applications for admission received. It is very gratifying to the Utah medical fraternity to know that the Utah School of Medicine has been accorded Class "A" standing. This insures the students completing the two-year course in the local institution acceptance into the other Class "A" medical schools. Recent changes in the staff of the University School of Medicine are the appointments of E. Le Compte and A. J. Alexander as lecturers in anatomy.

One of the most enjoyable and graceful recent events in the Salt Lake medical circles was the farewell banquet given to Major Samuel C. Gurney at the Hotel Utah by the members of the local medical reserve. For four years Major Gurney, as Medical Chief of the 104th Division, O. R., has worked with a wonderful spirit to build up the reserve. Largely to his efforts it is due that today Utah carries the highest per capita membership in the medical reserve of any of the states. In appreciation of that unflagging interest, the reserve officers tendered the banquet, and a memento of the years of association in the shape of a handsome ring. From Salt Lake he goes to the Canal Zone for a two years' tour of duty. We can only hope that at some future date the department will see fit to send him back to us.

Eight applicants for registration to practice medicine in Utah were successful in passing the recent examination before the Bureau of Registration; fifteen were admitted to practice by reciprocity and seven obstetricians passed the examination.

Applicants to practice medicine were: Chester Marsh of San Francisco, James Hayward of Logan, Leo C. Warenski of Murray, Paul V. Jameson of Spanish Fork, and Roy W. Robinson, Hector M. Ross, David B. Gottfredson and Fred M. Poulson, all of Salt Lake.

Those admitted by reciprocity were: William Monroe McKay, Cecil Stuart Wright, Sanji Oda of Ogden, Ernest Leroy Hansen of Logan, James Rex Marshall of Tooele,



Lloyd Lorenzo Cullimore of Pleasant Grove, and Clint A. Laffoon of Kamas, Stelios N. Sakorraphos, Beryl Iles Burns, Oza Joseph LaBarge, Wilford Joseph Reichmann, Charles Sanford Roller, Donald Charles Shelby, Moore Lowry Allen and Joseph Park Tuttle, all of Salt Lake.

To practice obstetrics were: Eunice Thornton of Mid-west, Wyoming; Ettie E. Ballam and Willard Ballam of Logan, Avilda Cook of Cedar Valley, Annie J. Gunnison of Salt Lake, Lucinda Richards of Bountiful, Lydia A. Spencer of Lees Ferry, Arizona.

**Salt Lake County Medical Society** (by W. G. Schulte)—The meeting of September 13 was called to order by President F. H. Raley. W. G. Schulte, secretary pro tem. Thirty-two members were present.

E. F. Root, president of the Pacific Northwest Medical Association, reported on the recent meeting of that association. He gave the history of the organization and outlined its rapid growth. He discussed several of the papers that were read at the meeting. He announced that the next meeting would be in Boise, and urged all physicians to go. F. D. Spencer reported on some of the papers read at the meeting. Among those reported were papers by Carl F. Meyer, A. C. Ivy, J. W. Williams.

Application for membership signed by C. W. Countryman, and a transfer signed by E. P. Oldham were read.

## MEDICAL AND HEALTH AGENCY NEWS

The California Group Clinic of Los Angeles, operated by Mr. M. E. Diebold, closed its doors on August 31, according to the report of special agent Albert Carter of the Board of Medical Examiners. The manager claims to have lost considerable money in this another scheme to render medical service for ridiculously small fees.

It takes more than machine-made quantity production methods to serve the sick.

An amalgamation was completed August 15 between the Clara Barton Hospital and the Hollywood Hospital whereby these two organizations united, closing out the Clara Barton Hospital and moving the business to the Hollywood Hospital. The training school from the Clara Barton Hospital has been moved to the Hollywood Hospital and is functioning there. Miss Elizabeth Bachinger, directress of nurses at the Clara Barton Hospital, became directress of nurses of the new organization, and Miss Edith Hodgins, instructress of nurses, also remains with the training school. The new organization will be known as the Hollywood Clara Barton Memorial Hospital Association.

On July 29, construction commenced on the new wing to the Hollywood Hospital. This wing will conform to the structure of the present hospital. It will be reinforced concrete, Class "A," and will add 150 beds. It is expected that part will be ready for occupancy February 1, 1927, and that the whole addition will be finished before April 1.

**Saint Joseph's Hospital Staff** (San Francisco) discussed progress in obstetrical surgery at a recent meeting. Case reports were presented by Ernst Gehrels (peritonitis), Howard Dixon (lobar pneumonia), Arthur Sonnenberg (nephritis), A. S. Musante (fractured skull), and Samuel Barmak (cancer).

Roy Morris spoke on "Observations from Eastern Medical Centers," as they may be made profitable to the physician visitor.

Ludwig Emge in discussing advances in obstetrical surgery said:

Prophylactic episiotomy takes a foremost place. This procedure, by no means new, marks an important step toward the preservation of the perineum. The slightly deviated midline operation is the most feasible and serviceable type. Careful technique must be observed. Many

obstetricians have abandoned silkworm gut sutures in perineal repairs and use forty-day chromic catgut instead, the patient's comfort being markedly benefited by this procedure. Next in importance is the Gwathmey method of obstetrical analgesia in its relation to cervical trauma. A large number of women delivered by this method were found to have greatly lessened the hazard of cervical laceration. Cervical laceration of sufficient size should be repaired before the patient leaves the hospital. Immediate and intermediate methods have been used, but cervical repair is better in the intermediate group, because the average practitioner has less trouble in detecting cervical laceration eight or nine days after delivery.

The low or cervical Caesarean section is accepted by the well-trained obstetrician as the operation of choice in certain patients. Its cardinal virtues, indications, and contraindications must be remembered. The technique of this operation is more difficult than that of the classical section.

The advantages and comparatively narrow field of the new Kjelland forceps must be understood in using these improved instruments.

D. B. Plymire discussed Emge's paper and touched on "twilight sleep" anesthesia. The program for October 13 includes: Newer methods of gall bladder treatment, by G. D. Schoonmaker, and handling of mental, drug and alcoholic patients, by V. P. Mulligan.

**The Women Physicians' Club of San Francisco** on September 7, 1926, entertained Miss Grace Abbott, chief of the Children's Bureau, Washington, D. C., at a dinner at the Clift Hotel. Louise B. Deal presided. Edna Barney, secretary, in her report stated that the membership of the club has now passed the one hundred mark. Ellen Stadtmuller introduced the speakers. A. Maximova-Kulaev gave an account of public health conditions in Russia. Among other interesting facts she gave the following:

"Fifty per cent of the physicians practicing in Russia are women, and there is no sex discrimination in regard to civil or university positions. Practically all physicians are employed by the government, and their salaries, which range from \$50 to \$150 a month, are barely sufficient for a modest existence. In Siberia, where the only means of transportation is the horse, one physician must cover an area of eighty miles. In the first nine months of 1924 there were in Russia: 109,000 cases of typhus exanthematicus; 41,000 cases of typhus recurrence; 90,000 cases of typhus abdominalis (typhoid fever); 12,000 cases of malaria, with a mortality of 5 per cent. Seventy-five thousand kilograms of quinin were imported by the commissariat of public health.

"In addition there have been epidemics of encephalitis, anthrax, variola, cholera, rabies, and trachoma. In 1925 in Ukrania there were 21,000 cases of scarlet fever among children; in and around Rostov 200 cases of leprosy. In some small nationalities in the Chechnia Mountains a survey showed that 70 per cent of the inhabitants have syphilis. Between 1914 and 1925 more than 3000 physicians died from infectious diseases. In some instances they were killed by the ignorant masses who accused them of having caused the epidemic.

"Despite all discouragements the medical profession are carrying on scientific work in all the centers of Russia, and have well-organized medical societies with its center in Moscow and local branches throughout the country."

Mariana Bertola, who has just returned from Europe, characterized the dole system now in force in England as utterly demoralizing. She told of families which included two or more able-bodied men who are living in idleness and subsisting on the dole, while property owners are being taxed out of house and home to maintain the system. This, together with the coal strike with its resulting evils and the enormous consumption of liquor, all found their reflection in the mental and physical condition of the children. In contrast, everyone in Italy is working, and she saw only one beggar while there. While the dictatorship of Mussolini would be resented by Americans, he has brought order out of chaos, and an excellent program of public health is planned and being put into force.

Miss Abbott referred to California as the women doctor's paradise. She stated that, while child welfare is of

equal importance to men and women, the latter have always taken a more active interest and put forth more strenuous efforts to make the United States safe for children. The child is the barometer of the social, economic, and medical condition of the community. While the cities of the United States compare favorably with those of other countries, the isolated districts are in many instances woefully lacking in intelligent interest on the subject of child welfare. It is on these areas that the Children's Bureau is concentrating its greatest effort. The aim of the Bureau is to educate the parents to the viewpoint that every child should be under the care of a physician and have periodic health examinations.

**Mount Zion Hospital**—The purpose of the weekly clinical pathological conference is to critically review records of all deaths that have occurred on either private or free service of the hospital during the preceding week.

Discussion was opened with a case of gangrenous appendix and generalized peritonitis, with marked cyanosis a prominent symptom. Patient was a male 24, suffering pain in the abdomen for two days, during which time he had taken considerable purgatives before calling a doctor. When seen by the doctor and advised to go to the hospital, patient refused for another thirty-six hours, finally consenting to operation. During operation it was noted that patient was taking the anesthetic extremely badly, and was cyanotic throughout the operation. On opening the abdomen a gangrenous appendix with a generalized purulent peritonitis was found. Simple drainage performed. Patient returned to bed in poor condition, extremely cyanotic and died the following day.

Dr. Leo Munter considered the patient's cyanosis a very unfavorable prognostic sign; but did not understand its cause, as heart and lungs were negative.

Dr. Charles G. Levison pointed out that the occurrence of cyanosis was a common condition accompanying profound toxemia of peritonitis; furthermore, that a patient who has been diagnosed as acute appendicitis should not be given morphin until in the ambulance on the way to the operating room.

Dr. Adolph Nahman stated that a very definite stand should be taken by the medical profession on the question of insisting on early operation for appendicitis where the patient refuses such advice. The safer course for the doctor is to withdraw from the case.

The record was presented of a man 26 who had taken lysol with suicidal intent. He was found in a semi-comatose condition about twelve hours after having taken the poison, and taken to the Emergency Hospital. Examination revealed extreme shock, board-like rigidity of entire abdomen, suggestive of a perforated viscus. Exploratory laparotomy proved to be negative for any evidences of perforation or peritonitis. The patient subsequently developed bilateral lobar pneumonia and died within three days.

In the course of the discussion Dr. F. I. Harris stated that he had never seen a case of perforated viscus from lysol poisoning, and thought that if the patient had taken a sufficient quantity of lysol to cause immediate perforation of the stomach death would probably have resulted from the shock of the lysol poisoning before he could have been seen by a physician. Dr. Harold Brunn also had never seen a case of perforation of the stomach from lysol poisoning.

It was felt that in this particular case the abdominal findings were due to reflex rigidity from the pneumonic process which undoubtedly had started previous to operative interference. Autopsy findings confirmed this impression, as it showed no pathological changes in the abdomen, but a complete pneumonic solidification of both lungs.

The record of a patient with vascular cerebral hemorrhage causing bilateral paralysis and symptoms simulating decerebrate paralysis was discussed. Male, 51, seen for the first time at 6 p. m., at which time he was in state of semi-coma, with a spastic paralysis of the entire right side. Heart and respirations normal. Patient was transferred to hospital, and at 8 p. m. began to have

repeated convulsions at frequent intervals accompanied by a deep coma, Cheyne-Stoke respiration, and generalized spastic paralysis involving extremities of both sides, the individual muscles showing myoclonic contractions, and body arched in opisthotonos. Conjugate deviation of eyes was present. Pupils dilated. Ophthalmoscopic examination of fundi showed marked early papulo edema of the discs, most marked on the left side.

Cisterna-Magna puncture done and about 10 cc. bright red cerebral spinal fluid removed; and 16 ounces of blood removed by venesection. Patient continued in a deep coma and expired within two hours from respiratory failure. Blood pressure at the onset of attack was 180/40, and when taken immediately after venesection was found to be 220/.

Doctor Firestone brought out the fact that there is a poor prognosis in the massive hypertensive type of cerebral hemorrhage.

Dr. Julian Wolfsohn enlarged on the advantage of Cisterna-Magna puncture over the routine spinal puncture in cerebral hemorrhage, and confirmed the value of venesection, although in this particular instance the hypertension persisted despite such drastic measures for relief.

## NEWS ITEMS FROM CALIFORNIA BOARD OF MEDICAL EXAMINERS

By CHARLES B. PINKHAM, M. D., Secretary

Dr. Walter Anderson Pleaded not guilty today in the Superior Court to a charge of attacking Gloria Delmar, 19, film actress, last June. His trial was set for October 5.—Los Angeles Herald, August 23, 1926.

According to the Los Angeles Record of August 21, 1926, Dr. William Balsinger, plastic surgeon, was granted a judgment for \$75, fee due him for remodeling the nose of Rena Amato, film actress, who last year obtained a \$25,000 judgment against Dr. Gertrude Steele, naturopath, whose license was revoked February 10, 1925, as noted in "News Items" of February, 1925, issue.

The "face peel" operation of the beauty specialists claimed another victim when Louise Wulburs died suddenly following an application of a phenol solution to her face. The records of the Board of Medical Examiners show that several other deaths are reported to have resulted from the absorption of carbolic acid applied to the face by so-called beauty specialists in the operation known as "face peel."

C. L. Brakeiron, a recent arrival in Los Angeles, was charged by H. A. Miller of Berkeley, inspector for the State Board of Chiropractors, with posing as a chiropractor when he had no license to practice, according to the Eureka Standard of September 4, 1926.

Dr. L. Burcans, proprietor of the Elite Pharmacy at 3030 West Pico Street, was under arrest today, and several cases of liquor said to have been found in his store by officers were being held as evidence, according to a report by federal prohibition agents.—Los Angeles Herald, September 1, 1926.

Orange County chiropractors want a department reserved for drugless practice in the proposed new county hospital if such an institution is built. Claiming that such a hospital should be built to serve the needs of all the taxpayers and that fair and constitutional rights be granted equally to drugless practitioners as well as the medical doctors, the Orange County Chiropractors' Association has addressed a communication to the county supervisors, setting forth their position. . . .—Santa Ana Register, August 20, 1926.

According to the Los Angeles Times of September 4, 1926, the Board of Chiropractic Examiners has continued the hearing of Charles H. Wood, president of the Los Angeles College of Chiropractic, charged with having obtained a California chiropractic license through fraud and deception. The case was continued to obtain further depositions from the East, it being alleged that the chiropractic college of which Doctor Wood says he is a graduate and where he was a resident student has no record of his having completed the course.

Dr. H. H. Ells, well-known physician and surgeon, who has been under surveillance for some time as a suspected seller of dope to addicts, was arrested today on a charge of violating state narcotic laws. According to Inspector Earle of the State Board of Pharmacy, Doctor Ells sold a small quantity of morphin for \$15 to a woman operative sent into his office to make the purchase. He denied the allegation, but was to be arraigned in court today.—Los Angeles Record, September 1, 1926.

Despite strenuous objections made by his counsel, the case against W. Roy Graham, asserted Alhambra doctor, was on the calendar for trial today before Superior Judge Charles S. Burnell on forty-two counts charging him with grand larceny and embezzlement. . . . More than \$10,000 was alleged to have been fraudulently obtained by the doctor from Mr. and Mrs. S. Mason Meek of 104 Los Tunas Street, San Gabriel. . . . (Los Angeles Herald, August 13, 1926). No one by the name of W. Roy Graham is licensed to practice any system of the healing art in the state of California. Prior mention appears in "News Items," February and June, 1926, issues.

Dorothy Holmes, chiropractor, who recently arrived in Eureka from Los Angeles, according to the Eureka Times of September 5, 1926, was taken into custody on the charge of violating the California law concerning the practice of chiropractic by posing as a chiropractor although she had no license.

A complaint has been filed calling Harrison B. Hulse, M.D., of Los Angeles before the board at the October meeting, based upon his plea of guilty on August 2, 1926, to violation of the State Poison Act re narcotics, he having been sentenced to serve sixty days in jail, which sentence was suspended.

The recent Civil Service examination for investigators for the Board of Medical Examiners, Osteopathic Examiners, Chiropractic Examiners, Dental Examiners, and State Board of Pharmacy, resulted in twenty-nine names being placed on the eligible list for positions which pay from \$135 to \$200 per month.

Revocation of the chiropractic licenses of Ray LaBarrie and James Compton, members of the first acting Board of Chiropractic Examiners of the state of California, is asked in applications filed with the board yesterday by Percy Purviance of Berkeley. Purviance voices the contention that the two chiropractors have not pursued resident courses in a regularly incorporated chiropractic school and have not practiced chiropractic in California for a period of three years.—Oakland Tribune, August 15, 1926.

Dr. F. H. McCarl, Long Beach physician, was wounded in the leg yesterday by a stray bullet in a gun battle between two other men, according to Long Beach police reports. . . . (Los Angeles Illustrated Daily News, August 13, 1926). The records of the Board of Medical Examiners, Osteopathic Examiners, and Chiropractic Examiners show no one by the name of F. H. McCarl licensed to practice in the state of California.

According to the Fresno Republican of August 18, 1926, two felonies, forgery and sending a telegram to deceive are charged against Dr. Carl H. McPheeters, mentioned in "News Items" of September, 1926.

According to the San Francisco Call of August 11, 1926, Rev. F. G. Collett, vice-president of the Reelimo Film Syndicate, is alleged to have charged F. E. Miller, ousted treasurer of the syndicate, with embezzlement. F. E. Miller claimed "that he was en route to Mexico to meet Orlando Edgar Miller of psychoanalysis fame, and that he had lost \$18,000 endorsing notes in connection with the film concern." It is reported that the charge was later dismissed.

According to the Oakland Times of August 17, 1926, Percy Purviance, manager of the Berkeley Chiropractic College and High School, denied in his answer the allegations upon which the Chiropractic Board based its suit to abate his schools, claiming that the board was without authority or jurisdiction in attempting to prevent chiropractic institutions from doing business. "The Chiropractic Board in its suit accused Purviance of operating a diploma mill, wholly designed to issue diplomas to unqualified persons."

Holding that Mrs. Louise Wulbers, who died while undergoing a "knifeless facial operation" at the hands of Dr. Zailick Saltzman, September 9, died as a result of shock, excitement, and the absorption of carbolic acid, a coroner's jury today recommended legislation against the use of carbolic acid or its agents by beauty specialists in beauty parlors. . . .—San Francisco Bulletin, September 14, 1926.

Ringling the door bell at the home of C. B. Willoughby, prominent physician of 1923 West Browning Boulevard, shortly after midnight, while a party was in progress, two youthful bandits entered with drawn guns and relieved the guests of \$100 in cash and a gold watch (Los Angeles Record, August 20, 1926). The records of the Board of Medical Examiners, Osteopathic Examiners, and Chiropractic Examiners do not show anyone by the name of C. B. Willoughby licensed to practice in the state of California.

According to the San Francisco Examiner of September 16, 1926, Dr. A. M. Waters of Los Angeles, who has come to the notice of the investigation department of the Board of Medical Examiners on prior occasions, committed suicide on the eve of his appearance in court on a grand larceny charge involving \$1500. Mrs. Seilaff, following her arrest, declared that Aimee Semple McPherson had told her Doctor Waters had promised to produce a "Miss X" and that she, Mrs. McPherson, had given him \$125. Mrs. Weisman said that Mrs. McPherson told her Doctor Waters failed to get a masquerader, saying that "his party had got cold feet." A report from the Michigan board in 1915 related that the certificate of Archibald M. Waters had been revoked in 1917, "obtained by fraud."

## READERS' FORUM

Santa Barbara, California,  
September 13, 1926.

Dear Editor—I have received the copy of CALIFORNIA AND WESTERN MEDICINE containing my article on "Education of the Public in Elementary Medical Science." I am very much pleased with the way in which this article has been issued, as well as the complimentary comments you have made concerning my work, and I want to thank you for all this publicity. You perhaps do not realize what it means to me personally in a community of this kind in the work that I am trying to do.

Our Association has just inaugurated a Prize Essay Contest for the best essay on diphtheria to be competed for by parents of children whose ages make them liable to contract this disease. It has been actuated by the campaign now being waged throughout the country for the immunization of children. One of the physicians here told me today that the State Board of Health is not behind this campaign, which surprised me very much.

GEORGE E. COLEMAN,  
President, Santa Barbara Branch American  
Association for Medical Progress.

Deaths from wood and denatured alcohol poisoning numbered ten during the six months' period. During the same months of 1925 and 1924 there were fifteen and eight deaths, respectively. Deaths from this form of acute poisoning are unquestionably less frequent than they were in 1920 and 1921. Prior to these years, however, it was a comparatively rare occurrence to have a death reported from this cause.—Statistical Bulletin, Metropolitan Life Insurance Company.

Alcohol is denatured by our government.

Any disturbance of the carefully built-up equilibrium between parasite and host would tend to bring about serious consequences for either. A sudden increase in virulence of the parasites to which the human body had previously acquired tolerance would spell disaster to the latter, while a decrease in the aggressivity on the part of the former or an increase in the resistance of the host would correspondingly prevent infection.—Science, August 13, 1916.



